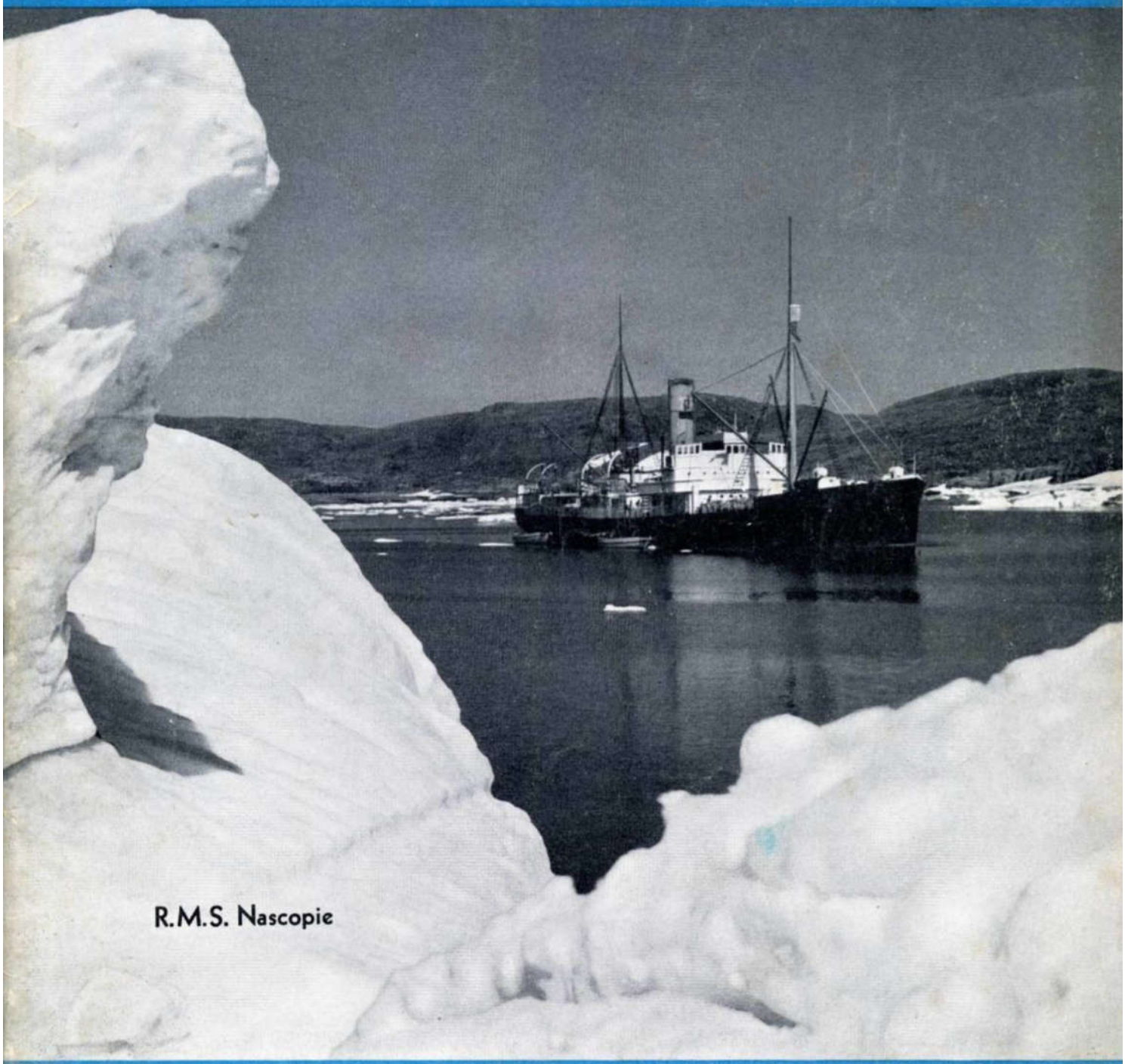
The Beaver

A MAGAZINE OF THE NORTH



R.M.S. Nascopie

OUTFIT 276
SEPT. 1945

PUBLISHED QUARTERLY BY
Hudson's Bay Company.
INCORPORATED 2ND MAY 1670

M.S. "Fort Charles" at Moosonee. — Ione and Peter Hall.

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OUTFIT 276 — SEPTEMBER 1945

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ONE DOLLAR A YEAR

PUBLISHED QUARTERLY BY

HUDSON'S BAY HOUSE — Hudson's Bay Company. — WINNIPEG, CANADA

INCORPORATED 2ND MAY 1670

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FOUNDING FORT EDMONTON

By C. Parnell

NEXT month will see the one hundred and fiftieth anniversary of the founding of Edmonton House, the Hudson's Bay fort which eventually developed into Edmonton, capital of Alberta. The original fort was not built, however, on the site of the present city, but some twenty miles down stream near the junction of the Tea or Sturgeon River with the North Saskatchewan.

In 1794, Angus Shaw of the North West Company heard that the region around the confluence of those two rivers was "a rich and plentiful Country, abounding in all kinds of animals, especially Beavers and otters, which are said to be so numerous that the Women and Children kill them with sticks and hatchets." Next summer, therefore, he erected a trading post, Fort Augustus, on the north bank of the Saskatchewan about a mile and a half west of the Sturgeon.

A few months later, William Tomison, chief of the Hudson's Bay Company's inland trade, followed Shaw, and built a post a musket shot from his rival's fort. Apparently in honour of the deputy-governor, Sir James Winter Lake, who lived at Edmonton in Middlesex, he named it Edmonton House.

On October 5, 1795, Tomison recorded that he "arrived where the Canada Companies has built Houses during the summer." Having chosen a site for his post, he took his men up the Saskatchewan to get pine timber, there being none near the site of the fort fit for building purposes. On October 13, they began erecting the first house. The walls were probably built of squared logs with tongued ends fitting into vertical grooves made in the uprights. The chimneys were of stone, and the roof of "small pine sticks" covered with sod. The flooring and partitions were of pit-sawn planks, and the windows of parchment.

Edmonton House evidently consisted of four buildings—the master's house, the men's house, the "victual house," and the blacksmith's shop. The trading room adjoined the "master's apartment" in the main building, which was 60 feet long, 24 feet wide, and 17 feet high. The men's house was 32x18x16.

By November 12 they had finished the two houses outside, and begun to dig a trench in which to place the "stockadoes." A week later they finished stockading the front of the house. On November 23 they began building the smithy, which was finished and mudded three days later, and on December 7 they erected a 60-foot flagstaff. The work of stockading went on slowly, and by Christmas they had only completed the front and one side. Not until April 23 was the job done—a square palisade, 40 yards on the side. But the work of construction still went on, for in the journal for May 5 we read: "The Men stockading in a place for a Watch House."

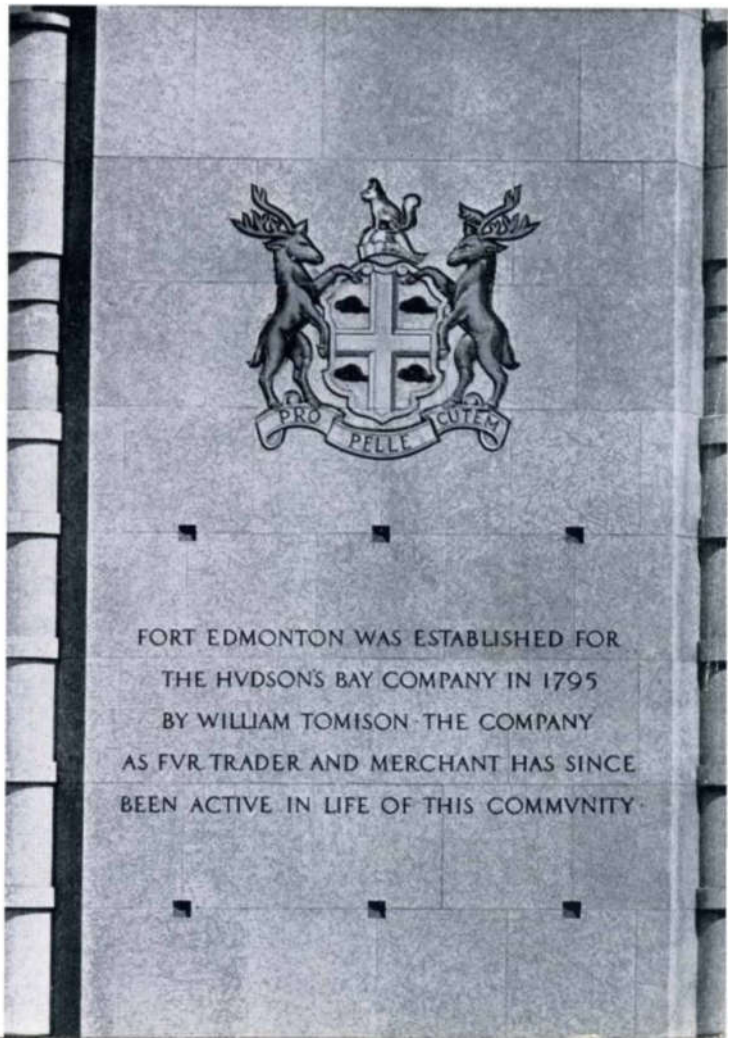
By May 21, the first season's furs and skins had been baled, and on that date Tomison left with the returns for York Factory, leaving Alex Flett in charge.

A word now about the founder of Edmonton House—William Tomison. He was born in 1739 at South Ronaldshay, Orkneys, and joined the service as a "labourer" in 1760. His first few years were spent at York Factory; then in 1766 he was moved to Severn. Next year he was sent out up the Severn to Lake Winnipeg to bring the Indians down to trade, and the following spring he visited the site of the future city of Winnipeg—the first Hudson's Bay man to do so.

In 1776 he was transferred to Cumberland House as chief factor, to organize the Saskatchewan River trade. Ten years later he was appointed to the supreme control of York Factory and its inland trade, and the same year established South Branch House and Manchester House on the Saskatchewan. In 1792 he erected Buckingham House, not many miles west of the present Saskatchewan Alberta border, where the North West Company's Fort George gave him stiff opposition.

In September 1795, hearing that Angus Shaw had gone to build a post at the mouth of the Sturgeon, he embarked from Cumberland House, and made his way upstream with the object of erecting an opposition fort.

On a corner of the Company's modern store in Edmonton, this inscription commemorates the founding of the first of the four Edmonton Houses.


PRO PELLE CUTEM
FORT EDMONTON WAS ESTABLISHED FOR
THE HVDSON'S BAY COMPANY IN 1795
BY WILLIAM TOMISON THE COMPANY
AS FVR TRADER AND MERCHANT HAS SINCE
BEEN ACTIVE IN LIFE OF THIS COMMVNITY

Having built Edmonton House, he spent the next four winters there, excepting that of 1796-7, when he sailed on furlough to Great Britain. In London the Governor and Committee recognized the good work he had been doing by giving him a presentation sword. Home in the Orkneys, he established a school for poor children of the parish.

He had not been back in Edmonton House more than a year when something happened which necessitated his return to the Old Country. Two Indians came to the post looking for gifts. They had nothing to trade, and Tomison turned them away empty handed. Whereupon one of the natives drew his knife and gave him "a Cruel Stab in the inside of the left Knee, which almost went through." The wound was bad enough to incapacitate him for northern travel for a few months, so he sailed again for England from York Factory.

He returned the following year, but in 1810, he finally retired from the Company, having served it faithfully and well for fifty years—except for a three year absence in Britain.

It appears that he was never very popular with either whites or Indians—the latter possibly owing to a strict Presbyterian upbringing. William Auld reported that at Cumberland House "if he had staid another year almost every Indian belonging to Cumberland House would have been driven to the Canadians in consequence of his refusing to give them liquor."

The tablet unveiled by the Lieut.-Governor of Alberta near Fort Saskatchewan on August 8, 1927. Later research showed that "1794" should be "1795," and that "1807" is not correct.

HISTORIC SITES AND MONUMENTS BOARD OF CANADA
FORT AUGUSTUS.
FORT EDMONTON.
ON THE RIVER FLAT BELOW STOOD
FORT AUGUSTUS, ESTABLISHED BY THE NORTH WEST COMPANY IN 1794;
FORT EDMONTON, ESTABLISHED BY THE HUDSON'S BAY COMPANY IN 1795.
RIVALS IN TRADE, ALLIES IN DANGER, THESE COMPANIES CARRIED THE FLAG AND COMMERCE OF BRITAIN, BY WAY OF THE GREAT RIVERS FROM THE SHORES OF THE ATLANTIC OCEAN AND HUDSON BAY, TO THE PACIFIC AND ARCTIC OCEANS.
THESE FORTS WERE ABANDONED IN 1807.
ERECTED 1926.

On his retirement to South Ronaldshay he built himself a fine house and later a tomb. A few days before he died in March 1829 he endowed a second school, and instructed his trustees to set aside £2000 for erecting a larger and more up-to-date building, now known as Tomison's Public School.*

So ruthless was the competition between the Hudson's Bay and North West Companies that the country around Edmonton House was soon depleted of its furs. In the winter of 1799-1800 plans were accordingly made to move the two forts to the site of the present city of Edmonton.

When this transfer actually took place, we have as yet no means of determining. The late Prof. A. S. Morton in his *History of the Canadian West*, states on page 463 that the move was made in the spring of 1801, and on page 511 that the second Edmonton House was established in 1802. In a letter to the writer he opined that the first fort on the site of the modern city was built in 1801 and named Nelson House (No. 2), and that its name was changed to Edmonton House the following year.

This contention he based mainly on the fact that on Arrowsmith's map of 1795 with additions to 1802, Nelson House is shown on the north bank of the Saskatchewan, north of the Beaver Hills, "at the site," as he wrote, "of the present city of Edmonton." (Actually the Beaver Hills are east, not south, of Edmonton city.) Arrowsmith, however, did not keep his maps up to date. This is clearly shown on his map of 1795 with additions to 1814. By the latter year, Edmonton House had been moved three times and finally established on the site which it occupied for about a century. But on this map, Edmonton House is shown in its original position, at the mouth of the Tea River. Moreover, Nelson House, which was abandoned in 1801, is still shown on the map of 1814. Even on the Arrowsmith maps of 1824 and 1832, Edmonton House is shown in its first location.

All we can be sure of, from the records now available, is that the post was moved from its original location to the site of the future city sometime between September 1801—when David Thompson visited Fort Augustus—and September 1806—when the earliest journal of Edmonton House now extant commences.

This second Edmonton, together with Fort Augustus (No. 2) was closed in 1810 and moved many miles down stream to the forks of the North Saskatchewan and White Earth Rivers, near the present Pakan, Alberta. But only three years later, they were both moved back again. There they continued to do business, side by side, until the union of 1821 brought the rival companies together, and Fort Augustus was abandoned.

Edmonton House, or Fort Edmonton as it was later called, continued to thrive and became the headquarters of the great Saskatchewan district of the Hudson's Bay Company. The settlement that grew up around it developed into a city and became the capital of the province of Alberta. Only about thirty years ago the last of the old fort buildings was torn down, and now nothing remains to mark the spot where a city was born.

Not far from the mouth of the Sturgeon River, however, the Historic Sites and Monuments Board of Canada erected in 1927 a cairn and tablet to mark the site of the original Forts Augustus and Edmonton.

*It was here that the late James Thomson, Fur Trade and Land Commissioner for the Company, and a member of the Canadian Committee, received his early education. Mr. Thomson represented the Company at the unveiling of the tablet to mark the site of the first Edmonton House.

The Governor-General and Princess Alice admire the blue foxes.

Presentation to the Princess

On May 29 the Company was honoured by a visit to Hudson's Bay House of His Excellency the Governor-General and Her Royal Highness Princess Alice. The occasion was the acceptance by the Princess of six matching blue foxes, presented to her by the Governor and Committee in recognition of the Company's 275th anniversary. H.E. and H.R.H., accompanied by aides-de-camp and ladies-in-waiting, as well as by Company officials, toured the building, in which they spent about two and a half hours.

His Excellency, with Mr. Riley, looking at a collection of Eskimo carvings and a display of northern photographs, depicting H B C transport, beaver and muskrat preserves, and wild life pictures by Lorene Squire.

In the board room Her Royal Highness receives from C. S. Riley, chairman of the Canadian Committee, a letter from the Governor, asking her to accept the gift of foxes.

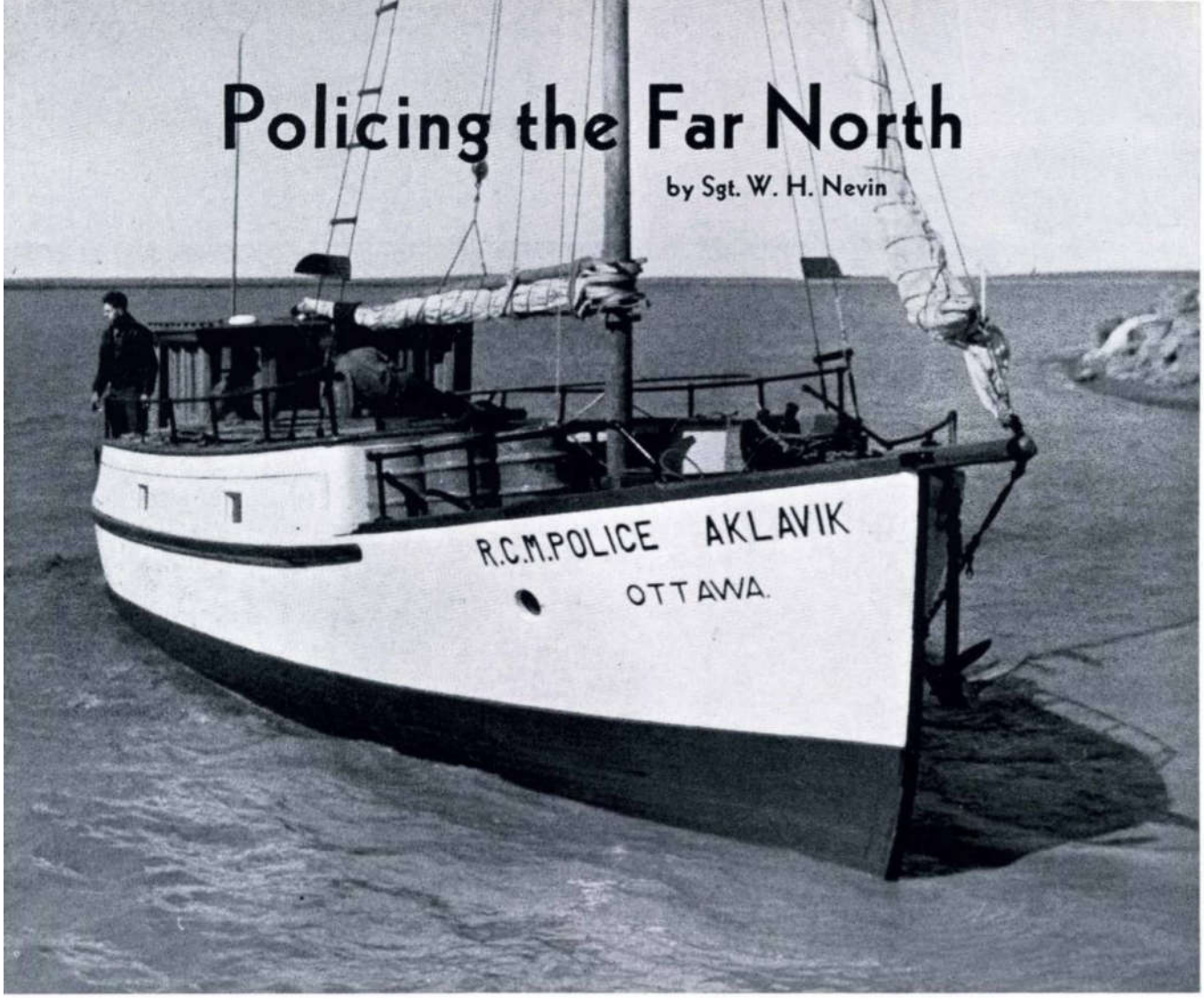
Princess Alice tours the fur trade depot attended by the manager, Ralph Ingram. In the background is a load of boxes destined for various posts, and marked in the traditional H B C manner.

H.R.H. showed a special interest in a display illustrating the domestic side of the fur trade, including the Company's nutrition program. Other displays examined by the vice-regal party consisted of raw furs of various kinds, radio station and weather instruments, and a selection of weapons and Indian handicrafts from the Company's historical collection.

Photos by A. Sorensen.

Policing the Far North

by Sgt. W. H. Nevin



A Royal Canadian Mounted Police boat operating in the Western Arctic. R. N. Hourde.

In between chasing mad trappers and battling icy blizzards, the Mounted Policeman in the Arctic has some rather prosaic but very necessary duties to perform.

THE work of the Royal Canadian Mounted Police in Canada's Arctic has been the subject of countless books, magazine articles, motion picture films and radio broadcasts, in which the Mounted Policeman in the North is portrayed as a kind of superman endowed with superhuman strength and endurance, and his life as a continual round of battling with icy blizzards and matching wits with desperate criminals. Invariably he is the central figure of a highly charged drama of life and death flavoured with a strong romantic interest. It cannot be wondered at, therefore, that the public has a gross misconception of the true functions of policemen in the Arctic, seeing them as they usually do through the highly coloured spectacles of authors, playwrights and movie producers whose main interests are royalties and box office receipts and who have, therefore, sacrificed realism for effect.

The following brief account of the duties and responsibilities of the policeman in the Arctic may serve to show that, rather than the glamorous figure pictured by popular fiction, he is a man doing a man's job which, though sometimes prosaic, is of vital importance in the orderly development of the vast areas of our hinterland.

The Royal Canadian Mounted Police force, in addition to its other responsibilities in the provinces, is solely responsible for the enforcement of law and order in the North West Territories and Yukon Territory. For the purposes of police administration, the North West Territories is divided into two districts; the Eastern Arctic, embracing that portion of the territories lying north of the eastern provinces, and the Western Arctic, taking in the territory north of the western provinces. Both districts have a number of widely separated detachments, each usually manned by a non-commissioned officer and a constable, who are responsible for the policing of their particular detachment area.

To generalize on conditions and police work in the Arctic as a whole is impossible, as conditions in the two districts vary considerably. For example, conditions in the Eastern Arctic, where there are but few white residents, differ in a great degree from those encountered in the Western Arctic, now served by an efficient air mail service, and where the numerous

white residents can avail themselves of the advantages of a wireless telegraph system. Extensive mining and oil development, construction of roadways and airfields in certain areas, increasing use of the aeroplane and radio, resulting in an influx of white workers, has wrought many changes in the northland, particularly the Western Arctic district, adding considerably to the innumerable duties already performed by the R.C.M.P. in that area.

With the inroads of civilization, the administration of law and order amongst the native population brings forth new problems. The average native is no longer the simple minded, unsophisticated individual popular fiction would have us believe; a certain amount of education and daily contact with the white man has vastly altered his habits, outlook, and mode of life, whether for better or worse time alone can tell; be that as it may, in this enlightened age investigations concerning natives transgressing the law require very different handling as compared with some years ago.

Collection of revenue is a very important duty of the northern policeman. That it involves considerable work and demands at least a working knowledge of the ramifications, machinery and regulations of many other Government departments can readily be understood when it is remembered that this revenue is derived from such sources as Dominion income tax assessments, naturalization fees, fur licenses, Crown timber fees and many others. Returns submitted to the various departments of the Government, accounting for revenue collected, are subject to check by officials, each a specialist in his own particular branch. It can be seen that a thorough study of departmental regulations concerning the collection of revenue, by detachment personnel, is essential.

The preparation of income tax returns—no easy task at any time—presents added difficulties in the North where the majority of the residents own large quantities of equipment necessary for earning their livelihood, such as traps, boats, canoes, engines, cabins, etc., on all of which they can legitimately claim a percentage of depreciation yearly. Very few are capable of making out the required forms and the policeman, being the income tax collector for the district, has usually to gather the required information by

An R.C.M.P. "Norseman" at Coppermine. L. A. Learmonth.

The Mounted Policeman is the northerner's friend.
L. A. Learmonth.

patient questioning, prepare the proper forms and collect the amount of tax assessed, and satisfy the reluctant taxpayer that his income tax business has been competently handled. To further complicate matters for the policeman, he often has to deal with trapper partnerships, one member of which may have a substantially larger share in the business than the others, thus posing a nice problem in the proportionate allocation of profits and deductions for depreciation, business expenses, etc.

The Eskimos, many of whom in good fur seasons earn a great deal of money, are also required to pay income tax. Educating the native mind in this respect calls for an infinite amount of patience on the part of the policeman. Ascertaining the earnings of these people, to which, more often than not, they are blissfully indifferent, is a major problem, but occasionally has an amusing side. The writer remembers an Eskimo who, on being instructed in the profound mysteries of income tax, was heard to exclaim with more than a little emphasis that he didn't want to "buy" any income tax, the "price" in his opinion apparently being exorbitant.

Fur export tax and game licenses are perhaps the chief sources of revenue in the Territories. All fur for export, which is considerable in quantity, is inspected and checked by the R.C.M.P. Permits, on which the various kinds of fur are enumerated, are made out in favour of the exporter, authorizing its export, and taxes imposed thereon are collected. Each bale of fur is tagged and a special seal affixed in accordance with the regulations governing its export. Game licenses are issued to, and fees collected from, numerous applicants. As there are many classes of licenses, the fees for which range from a few dollars to several hundreds of dollars, the policeman must investigate the status and residential qualifications of each applicant, to determine if he is entitled to a license and to ensure that the proper license is issued.

Duties in connection with Crown timber regulations devolve upon those members of the Force stationed in timbered areas of the territories. Part of this work

Cst. Richard Yates of the Western Arctic ready to start out on patrol in 1941. Wm. Gibson.

Royal Canadian Mounted Policemen arrive at a Mackenzie River post on the "Distributor."

entails the receiving and checking of applications to cut timber; the issuance of necessary permits, collection of fees and forwarding of revenue and returns to the Crown timber agent for the district. Patrols are made to check the actual quantity of timber cut under authority of permits issued.

Records incidental to the enforcement of the Vital Statistics Ordinance are kept by all detachments. Deaths, births and marriages of residents of the Territories, both white and native, are recorded. Returns are compiled and forwarded at regular intervals through the proper channels to the Registrar General.

Assistance to the public administrator in investigations relative to the estates of deceased persons in the N.W.T. is another duty demanding much time and effort on the part of the policeman making the investigation. While comprehensive instructions are available dealing with this phase of police work, many new and unforeseen problems and difficulties crop up, the solution of which depends largely upon the discretion and good judgment of the member conducting the investigation. Long and complicated enquiries may be expected in the case of persons dying intestate.

In such cases, complete inventories of all personal effects and property have to be made; perishable goods disposed of to the best advantage and requisite action taken to insure that all property belonging to the estate is properly safeguarded until instructions are received regarding its disposition, which is usually by means of public auction, a member of the police acting as auctioneer. Claims made against the estate are carefully investigated and have to be supported by statutory declarations. The existence or otherwise of debtors to the estate has also to be established. Documentary proof in connection with births and marriages of dependents and relatives of deceased may also have to be procured in order that the public administrator may be in full possession of the facts relating to the case when considering the legal rights of the various possible beneficiaries.

The R.C.M.P. acts for the public administrator in matters concerning the estates of all deceased whites, half-breeds, non-treaty Indians and Eskimos. In many instances, enquiries of this kind, because of their complicated nature, and due to the fact that property of the estate may be scattered over a wide district, drag on for a considerable time. The case of a trader who died some years ago may serve as an illustration of the difficulties and delay often encountered in dealing with estates of deceased persons. The trader in question had, up to the time of his death, been operating a trading store, catering chiefly to Indian trade. After his death, members of the R.C.M.P. detailed to deal with the affairs of the estate found his records to be

This is not a scene from a thriller, showing a Mountie "shooting it out" with a desperado from behind his overturned toboggan. It is merely Cst. L. T. Fyffe repairing a toboggan board. He is drilling holes in the wood with hard-nosed bullets.

in a state of extreme confusion. His bookkeeping methods had been, to say the least, haphazard; from the records available—which were anything but complete—a list of debtors to the estate, numbering several hundreds, was compiled. The magnitude of the task of finding and interviewing these debtors—the majority of whom were Indians—and endeavouring to collect the sums involved can well be imagined. Many debts were repudiated entirely, it being put forward by certain of the debtors that payment of their accounts had already been made, but that such payments had not been recorded owing to the admittedly careless business methods of the deceased. To add to the difficulties of this enquiry, considerable equipment, located at widely separated points, was involved and numerous claims against the estate were received.

The problem of destitution in the North West Territories and the issuance of relief rations to indigent whites and natives is one with which almost all police detachments are vitally concerned. During poor fur and hunting years, this duty takes up much time. To encourage natives to be thrifty and self-supporting is the aim of the detachment man, who is well aware that many natives are habitually lazy and improvident and are only too willing to be supported at Government expense for an indefinite period. Thorough investigation of the circumstances of each relief applicant is made. The policeman has wide discretionary powers, and it is with him that the final decision rests as to whether the case is one of genuine destitution. It is his duty to see that charges made for relief issues are properly allocated, either against the Indian Affairs Branch for Treaty Indians, or the Department of Mines and Resources in the case of whites, Eskimos or non-treaty Indians. To determine whether an Indian is treaty or non-treaty is often no easy matter; very often they themselves are unaware of their treaty names or numbers as listed on departmental records.

Routine duties and investigations carried out by the R.C.M.P. in the North West Territories for many other Government departments are varied. Brief mention of a few of the more important of these may be of interest. All civil aircraft operating in the Territories are periodically inspected and checked as required by the air regulations, as are also the many Government gasoline caches located at different points; radiotelegraph licenses are issued and revenue collected; observations of wild life are made and recorded; health of natives and general conditions enquired into; mail is carried to residents at outlying points and at some posts members of the force hold appointments as postmaster; work is performed in connection with the N.W.T. Mining Regulations. Reports on these and the many other activities of a like nature are submitted to the departments concerned.

It is only fitting that residents of the Territories have come to depend largely on the assistance and advice of members of the R.C.M.P. Help may be solicited in the writing of a letter or the drafting of a will, or in the case of a minor dispute arising between trapping partners, the advice sought from a member of the force is usually acted upon and the parties concerned come to an amicable settlement of their differences.

Many times have policemen on isolated detachments been called upon to render aid when, with no medical help available, whole villages of natives have been stricken with illness. It is a matter of record that

Jack-of-All-Trades

The northern policeman is required to do all sorts of jobs as well as preserve law and order. Top: Laying the foundation of a building at Port Harrison, P.Q. Centre: Bucking firewood. Bottom: Cutting ice.

R.C.M.P. on Great Slave Lake return from the fall fishery with a scow full of iced fish.

in such emergencies the practical measures taken by them have materially assisted in checking the spread of the disease, and helped to alleviate the sufferings of its victims. Nor is it anything new for the policeman to find himself in the role of midwife, gently helping a native woman bring a little Eskimo or Indian into the world.

The most important duties of the northern policeman are, of course, enforcement of the Criminal Code, Federal Statutes and North West Territories Ordinances. The onward march of civilization bringing, as it does, a considerable increase in the white population, tends to increase rapidly the volume of work in this respect. The satisfactory conclusion of so many investigations is apt to be somewhat delayed in the majority of cases, owing to climatic conditions and the lengthy and often arduous journeys by dog-team, canoe or boat necessitated in the securing of evidence. Unlike his confrere in the provinces, who, in the pursuit of an investigation presenting unusual difficulties, can obtain immediate advice and assistance, the northern detachment man usually has to rely solely upon his own judgment and initiative, taking such action as he deems necessary. Infractions of the game act and regulations, Indian act and liquor regulations are amongst the more frequently occurring offences with which he has to deal.

In the Territories a transgressor of the law, if convicted and sentenced to a term of imprisonment, usually serves his sentence at a police detachment, the personnel of which have to assume full responsibility for his safeguarding, food, clothing, exercise and general well-being. Sometimes as many as five or six prisoners may be serving gaol terms at a police post.

Divers investigations of a general nature are part and parcel of everyday duties. Location of missing persons, supervision of transients, accidental deaths and happenings and rumours of an unusual nature are enquired into and reported upon.

The R.C.M.P. member in the North West Territories is, of necessity, his own cook, carpenter and mechanic. In fact, to term him "jack of all trades" is but his due. That he can, and does, use a typewriter, saw or spanner with equal facility is to his credit. Much time and energy is necessarily devoted to such spare time jobs as the maintenance of buildings, equipment and transport—both land and water. During the brief summer season he is kept extraordinarily busy, painting and repairing buildings, boats and canoes; overhaul and repairs to engines may have to be made, perhaps a new building erected. New supplies and stores received have to be checked and carefully stored away; considerable quantities of fish or seal must be obtained and put away for use as dog feed, and a hundred and one miscellaneous jobs of a seasonal nature completed.

Men in the North are truly grateful that perpetual daylight prevails at this period of the year. Summer goes all too quickly and light snowfalls herald the rapid approach of winter; then comes the hauling of water transport high and dry, fitting of storm porches, doors and windows and the many preparations necessary in making the quarters frost-proof for a prolonged winter. Before the river freezes to too great a depth, many blocks of ice have to be cut and stored away, ready for use when summer comes, at which time river water is unfit for drinking purposes.

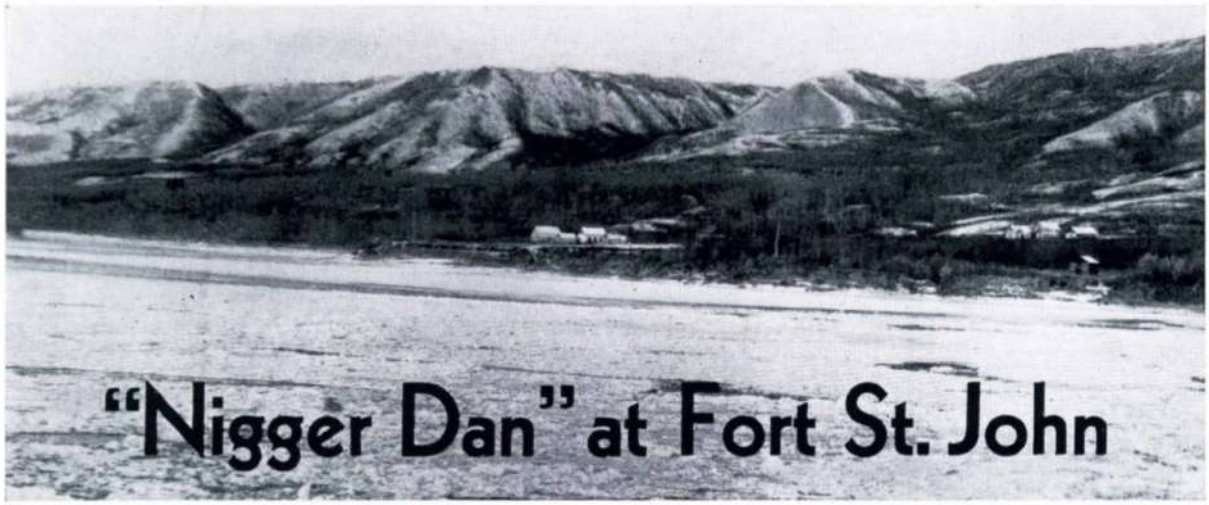
Although police service in the Arctic is synonymous with hard work and certain hardships and discomforts incidental to life in these regions, there is never any lack of volunteers for the few yearly vacancies. Each man applying for northern service is subjected to a rigid medical examination and is required to have outstanding qualifications. He must agree to serve in the North for a minimum period of three years—a very necessary stipulation since it is generally conceded that his first year of northern service is more or less spent in familiarizing himself with conditions of the country, habits and characteristics of the natives and work peculiar to the North. It is only in his second and third years that he reaches his peak of efficiency.

There are few, if any, policemen with northern service who are not willing and ready to volunteer to go back again. Many have served several terms there. For them, as for many others whose calling has taken them into the land of the midnight sun, the North holds a peculiar appeal. The efficient performance of their duties in remote northern areas demands the exercise of initiative and sound judgment to a great degree. They are doing much to enhance the already enviable reputation of the Force, whose motto is *Maintiens le droit.*

A red-coated Mountie is always present at Treaty Time. On the left is the Indian agent (G. Swartman), and in the middle two councillors of the Fort Hope Indians. Taken at Lansdowne House by C. N. Stephen.

The Only Known Photograph of Sir George Simpson

This photographic copy of a daguerreotype was recently discovered in the files of the celebrated Montreal photographers, William Notman and Son. There is no record of when the original was taken, but as Notman's was founded in 1856, four years before Sir George died, it may have been made by them in Montreal. Sir George was of stocky build, with blue eyes and—in his younger days—red hair. A traveller who met him in 1860 says that he had white hair and a white beard. The alertness and determination of the little governor, even at this advanced age, have been admirably caught by the daguerreotypist.



"Nigger Dan" at Fort St. John

Fort St. John in November, 1914, taken from the B.C. police barracks by T. W. S. Parsons (now Commissioner). The Company buildings are in the centre, Revillon Freres on the right.

A notorious and curious character of the old Northwest was the negro Daniel Williams, better known as "Nigger Dan," whom readers of Butler's The Wild North Land *will remember as a trouble maker at Fort St. John. Butler knew him in 1873, the late Chief Trader W. C. King in the following year. The accounts of both men are given here.*

By W. F. Butler

THE fort of St. John, on the Upper Peace River, is a very tumble-down old place; it stands on the south shore of the river, some thirty feet above high water level; close behind its ruined buildings the ridges rise a thousand feet, steep and pine clad; on the opposite shore bare grassy hills lift their thicket fringed faces nearly to the same elevation; the river, in fact, runs at the bottom of a very large V-shaped trough nine hundred feet below the prairie plateau.

On the north shore of the river, directly facing the tumble-down fort, a new log house was [in 1873] in course of erection by the Hudson's Bay Company. Work moves slowly in the North, and this log house lay long unfinished. One fine day a canoe came floating down the lonely river; it held a solitary negro—pioneer, cook, trapper, vagrant, idler, or squatter, as chance suited him. This time the black paddler determined to squat by the half finished log house of the Company. Four years earlier he had dwelt for a season on this same spot. There were dark rumours afloat about him; he had killed his man it was averred; nay, he had repeated the pastime and killed two men. He had robbed several mining shanties, and had to shift his residence more than once beyond the mountains on account of his mode of life.

Altogether Nigger Dan, as he was called, bore an indifferent reputation among the solitary white man and his half-breed helpers at the post of St. John's. By the Indians he was regarded as something between a beaver and an American bear, and, had his head been tradeable as a matter of fur, I believe they would have trapped him to a certainty. But, despite the hostile feelings of the entire community, Nigger Dan held stout possession of his shanty, and claimed, in addition to his hut, all the land adjoining it, as well as the Hudson's Bay fort in course of erection. From his lair he issued manifestoes of a very violent nature. He planted stakes in the ground along the river-bank, upon which he painted in red ochre hieroglyphics of a menacing character. At night he could be heard across the silent river indulging in loud and uncalled-for curses, and at times he varied this employment by reciting portions of the Bible in a pitch of voice and accent peculiar to gentlemen of colour. On the 12th of April, four days after my arrival at St. John's, my young host was the recipient of the following ultimatum. I copy it verbatim:

April 12.
KENEDY I hear by
Worne you that Com and Gett your
persnol property if eny you
have Got of my prmeeis In 24 hours And then keep away
from me because I shal Not betrubbled Nor trod on
only by her most Noble
Majesty
Government
(Sgd) D. T. Williams.

On the back appeared:

> I have wated longe A-day for an ancer from that Notis you toer Down and now It is my turn to tore down . . . .

Although the spirit of loyalty which breathed through the latter portion of this document was most admirable, it is nevertheless matter for regret that Dan's views of the subject of "persnol property" were not those of a law-abiding citizen; unfortunately for me, both the Hudson's Bay claimant and the negro occupant appealed to me in support of their rival rights. What was to be done? It is true that by virtue of a commission conferred upon me some years earlier I had been elevated to the lofty title of justice of the peace for Rupert's Land and the North-West Territories, my brother justices consisting, I believe, of two Hudson's Bay officials and three half-breed buffalo runners, whose collective wisdom was deemed amply sufficient to dispense justice over something like two million square miles. Nevertheless, it occurred to me that this matter of disputed ownership was one outside even the wide limits of my jurisdiction. To admit such want of jurisdiction would never have answered. "Rupert's Land and the North-West" carried with

them a sense of vast indefinite power that, if it were once shaken by an admission of non-competency, two million square miles containing a population of one twenty-fourth of a wild man to each square mile might have instantly become a prey to chaotic crime. Feeling the inutility of my lofty office to deal with the matters in question, I decided upon adopting a middle course, one which I have every reason to believe upheld the full majesty of the law in the eyes of the eight representatives of the Canadian, African and American races of man now assembled around me. I therefore issued a document which ran thus:

JUDICIAL MEMORANDUM

Various circumstances having occurred in the neighbourhood of the Hudson's Bay Fort, known as St. John's, on the Peace River, of a nature to lead to the assumption that a breach of the peace is liable to arise out of the question of disputed ownership, in a plot of land on the north shore of the river, on which the Hudson's Bay Company have erected buildings to serve as their future place of business, and on which it is asserted one Daniel Williams, a person of colour, formerly lived, this is to notify all persons concerned in this question, that no belief of ownership, no former or present possession, will be held in any way to excuse or palliate the slightest infringement of the law, or to sanction any act of violence being committed, or to occasion any threats being made use of by any of the said parties which might lead to a breach of the peace.

Executed by me, as Justice of the Peace for Rupert's Land and the North-West, this 22nd day of April, 1873. Signed, &c., &c.

I claim for this memorandum or manifesto some slight degree of praise. It bears, I think, a striking analogy to diplomatic documents for which of late years the British government has been conspicuous in times of grave foreign complications. But in one important respect my judicial memorandum was very much more successful than any of the political papers upon which it was framed; for, whereas they had been received by the respective belligerents to whom they had been addressed in a manner not at all flattering to our national dignity, my very lucid statement that, diplomatically speaking, two and two made four had a marked impression on the minds of my audience.

On the one hand, I clearly pointed out that murder, arson, and robbery were not singly or collectively in unison with the true interpretation of British law; and on the other, I carefully abstained from giving any indication of what would result from the infringement of that law in the persons of any of the belligerents.

I have reason to believe that the negro Bismarck was deeply impressed by the general tenour of the document; and that a lengthened perusal of the word "executed," in the last sentence, carried with it a sense of profound strangulation under which he long laboured.

By W. C. King
As told to Mary Weekes

George Kennedy, who was a connection of Mrs. Roderick MacFarlane's, and younger in the service than I, had preceded me in charge of the St. John post. I had had charge of this post for a short time the previous year. The outlaw Nigger Dan had come into the district from the States and was causing trouble, setting fires, stealing cordwood and getting furs illegally from the Indians. Young Kennedy became terrified. He was afraid of his life. He was losing business for the Company.

MacFarlane said, "I'll send King up there!" Nigger Dan began to terrorize me. I turned the tables on him. He was stealing my cordwood. I took the top off cartridges, filled them with gunpowder and inserted them into pieces of the wood. Then, unobserved, I watched Nigger Dan in his little shack put this wood in his fire. There were some loud explosions. He left his shack and made camp outside. He stole more cordwood. This, too, was loaded. Again his fire exploded.

Presently this outlaw began spreading poison for my dogs. And I discovered that he was picking the mud from between the logs of my store and stealing the pemmican strips that were stacked against the wall. I put some strychnine and croton oil in the meat.

A week later, I heard terrible groanings in his shack. An old fellow, La Flume, came running to tell me that Nigger Dan was rolling in agony and wanted to see me. He said he was dying. I didn't go. I thought he wanted to shoot me. I gave La Flume some epsom salts, a vomit and a purgative powder for the sufferer.

Nigger Dan got better. He stopped stealing my meat. One day, a month after this, when I was standing at the door of my house having a smoke, a bullet whizzed past my head. It just missed me. I got my little rifle and from my little garret window, banged back at Nigger Dan. This scared him a bit.

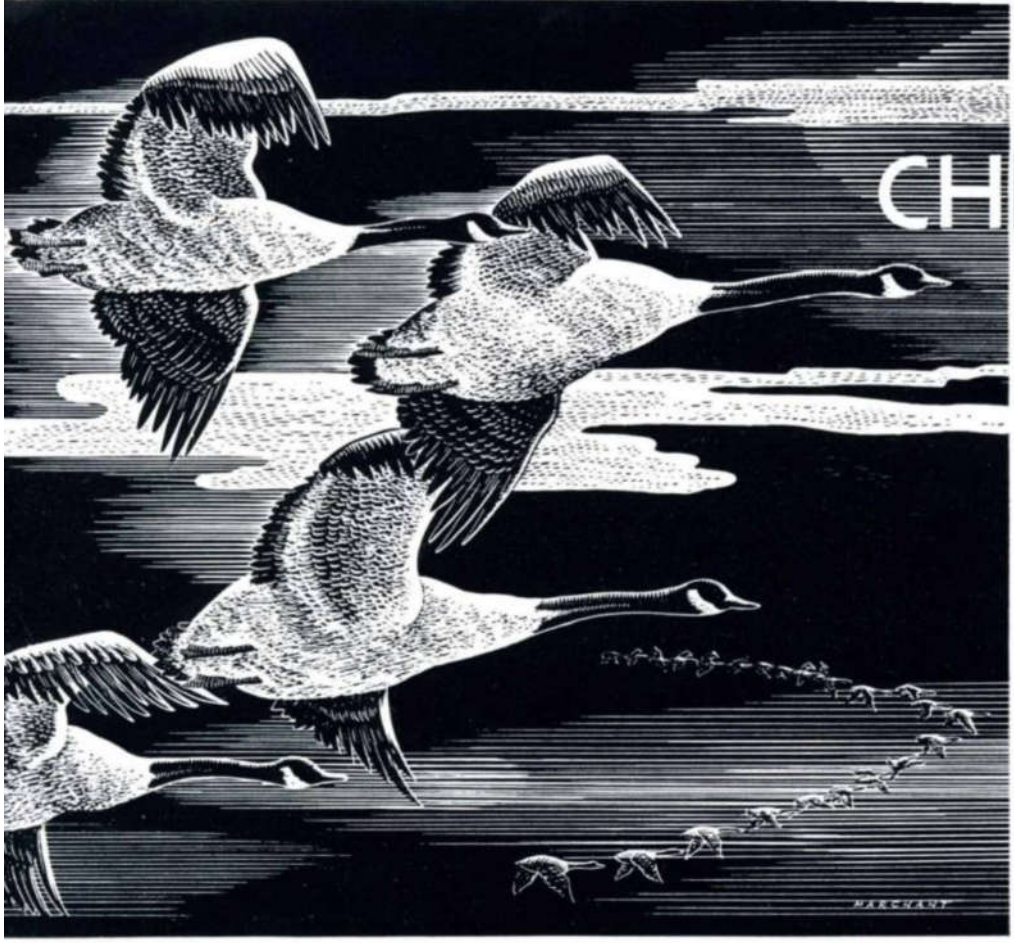
Soon after this little exchange of shots, I returned to my little house to find Nigger Dan there telling my wife how cruel I was to him. She told him that he had deserved punishment. He agreed to a truce of friendship with me. I had no further trouble with Nigger Dan. After I left Fort St. John the Mounted Police came up to the district and caught him. He wasn't quick enough. I felt sorry for the poor fellow. He was half daft. He was hanged at Edmonton.

Mr. King's memory appears to have been somewhat at fault here. It was not until 1893 that the Mounted Police came into the Peace River district; nor do the records of the British Columbia Provincial Police contain any record of such an arrest. However, J. P. Turner, historian of the R.C.M.P., points out that a negro named Jesse *Williams was convicted of murder at Calgary in 1884, and hanged there on March 29 of that year.*

Dan Williams himself was tried for attempted murder at Fort Saskatchewan in 1880. One James McKinlay had accused Dan of shooting at him, and as the negro had no lawyer to defend him, a Peace River friend of his named "Banjo Mike" undertook to act as his counsel. According to Rev. A. C. Garrioch, who describes the trial in his Hatchet Mark in Duplicate*, Banjo Mike was able to prove that Dan was only a short distance from McKinlay when the shot was fired. And his eloquent plea to the jury concluded triumphantly in these words:*

"Let me tell you this: I know, as many other miners know, that Dan Williams at a distance of one hundred yards can take the eye out of a jack-rabbit at every pop. Gentlemen, had Dan Williams had the slightest intention of harming Mr. McKinlay, he [McKinlay] would not have been here to-day to tell you the amusing little story whereby he gives you credit for some sense of humour without paying you much of a compliment for intelligence."

*Ryerson Press, 1929.



CHEVRONS in the SKY

by Dan McCowan

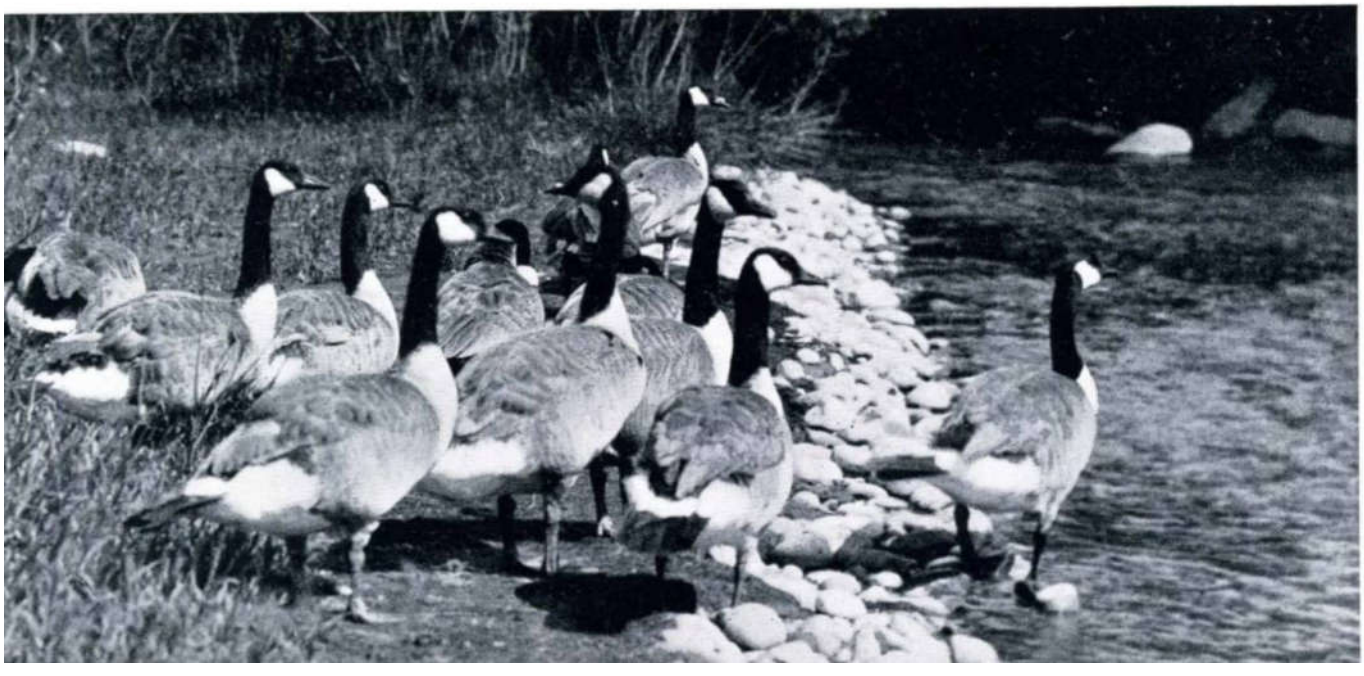
Canada Geese, by Harold Marchant. Courtesy Great West Life Assurance Co.

IT is hard to understand why a stupid person should be called a goose, or why such a gross libel on a splendid type of bird should persist. Striving to come within camera or shot-gun range of a group of wild geese, one is convinced that these are the most vigilant and wary of all waterfowl native to Canada. Otherwise they would long ago have gone the way of the Passenger Pigeon and the Whooping Crane.

In bygone days throughout western Canada the native wild geese ranked with the buffalo and the whitefish as an important source of food. Happy was the Hudson's Bay factor whose trading post larder in late autumn contained many hogsheads of plump salted geese, for their presence rendered the oncoming winter much easier to contemplate. Glad were the Cree people when, at the advent of spring, the clarion call of the northbound "honkers" came drifting down from the sky. Small wonder that to them the month of April was known as *Niske-pesim* or Goose Moon.

As soon as the lakes and rivers have been freed from winter ice the Canada Geese come home again. They are first of the migrant birds to hear the call of spring and to respond to that strange magnetic impulse which brings them back to the northland wilderness. The journey from Colorado or Texas to the Northwest Territories of Canada is much more leisurely than is generally supposed, the birds stopping frequently to feed and rest. During the initial stages of the flight an average distance of ten or twelve miles a day is covered, but as the voyagers near their destination they may do thirty-five or forty miles daily. Each squadron is led by an old gander who knows the landmarks and is familiar with good stopping places along

Canada Geese are the first of the migrant birds to hear the call of spring. Dan McCowan.



A cloud of Greater Snow Geese rises from the marshes of Richards' Island. Lorene Squire.

the way. Flying either by day or night, these great birds are singularly noisy in mid-air, the gabbling of the aerial travellers often revealing their presence when otherwise they might pass unnoticed.

During recent war years the northbound geese were somewhat perturbed by airplane activity on the prairies of western Canada. This was particularly noticeable in the Rosser-Grant Lake area of Manitoba, where normally over half a million geese were wont to congregate each spring. Air Force planes droning by day and night so disturbed the birds that they betook themselves elsewhere to rest and sleep. Yet in autumn thousands of wild geese feeding on the salt marshes of Fraser River delta pay but little heed to the almost ceaseless skyway traffic over the neighbouring air port of Vancouver.

Amongst the Indians of northern Canada it was current belief that little birds such as warblers, wrens and the like came north, not under their own power, but by securing transportation on the backs of friendly geese. This is of course merely a fable, although one would be charmed to see a goose make a happy landing with a deck load of thrushes and song sparrows. Unfortunately the time table of the geese and that of the lesser migrants does not coincide, for the waterfowl arrive weeks ahead of the singing birds of passage. It is nevertheless significant that stories of feathered travellers "thumbing a ride" should come from such widely separated countries as Siberia and Egypt as well as from the shores of Hudson Bay. Many Plains Indians of the Saskatchewan watershed were confident that Sand Hill Cranes likewise carried avian passengers on the long distance spring flight.

The Snow Goose, better known perhaps as the "Wavey," has a singularly appropriate scientific name —that of *Chen hyperborea*, the goose from beyond the north wind. It is a medium sized white goose with black wing tips, a carmine bill and pink feet, and is more sociable and less haughty than its larger relative the "Honker." Nesting across the Arctic coast of Canada from Labrador to the Yukon, it has been greatly reduced in numbers as compared with, say, one hundred years ago. Yet these white geese are still plentiful enough to rank as one of the prime natural resources of the northland. To the natives of Arctic America their coming in spring is a noteworthy event. Henceforth eggs, fresh and otherwise, and fowl afford welcome change of diet from the monotony of seal and whale meat and fish.

Samuel Hearne, the greatest hiker in the history of Canada, lived at Fort Prince of Wales in 1781, and there had ample opportunity to observe the legions of waterfowl then present on the shores of Hudson Bay. Of the Snow Geese he wrote:

Snow Goose. Dan McCowan.

"They fly in such amazing flocks, that when they settle in the marshes to feed, the ground for a considerable distance appears like a field of snow . . . They are killed and salted in great numbers for Winter provision; . . . and will, if proper care be taken in curing them, continue good for eighteen months or two years. . . . Some of the Indians frequently kill upward of a hundred Geese in a day. Some years back it was common for an Indian to kill from a thousand to twelve hundred Geese in one season."

In another part of his journal Hearne tells of his men having driven a large flock of Canada Geese (grounded during the period of complete moult) down Churchill River and into the stockade surrounding the fort. The captive birds, amongst which were many goslings, were fed and fattened for winter use.

While an occasional flock of Snow Geese may sometimes be seen on the St. Lawrence river near Quebec, the main migration route is west of the Great Lakes. Thirty years ago, when seed grain was generally broadcast, the birds on their northward journey took considerable toll of wheat from prairie farmers' fields. Mechanical seeding deprived them of that source of food, although they yet fill their crops with the tender blades of sprouting grain. Great numbers of them fly north along the coasts of Oregon, Washington and British Columbia, whence, crossing the Rockies, they congregate temporarily on Great Slave Lake before resuming the flight to nesting sites on the Barren Lands and on islands off the Arctic coast. I have no recent figures as to the abundance or scarcity of these birds, but as late as the year 1907 no fewer than fifteen thousand Snow Geese were salted down at Fort Chipewyan alone. In 1943 I saw part of the southbound legions of "Wavies" resting in sheltered lagoons of Vancouver Island, and was then convinced that, despite the activities of northern gunners, the tribe is far from extinct.

Watching the squadrons of wild geese swinging across prairie skies in spring and autumn one is led to speculate as to their chevron flight formation. Does the wedge-shaped method of travel facilitate flight by cleaving the air or, as has been suggested, does it merely enable each bird in the group to have clear unobstructed vision ahead? White pelicans, commonly flying in line ahead, are apparently convinced that theirs is the most efficient flight formation, and so long as the leader can see clearly the others seem content to sacrifice outlook to greater ease in flying. It is a pretty problem, this V-shaped grouping in mid-air—

Blue Goose during the moulting season at Perry River.
Angus Gavin.

Lesser Snow Geese and goslings, Richards' Island.
Lorene Squire.

one not lessened by the spectacle of a gaggle of geese going down wind at sixty miles an hour—still in arrow head formation.

The Blue Goose is by no means a rare bird, yet until 1928 the nesting place of this waterfowl remained undiscovered. In that year J. Dewey Soper, of Ottawa, after long and patient search, found nests and eggs of these birds on Baffin Island. What a thrilling experience that must have been to the eminent Canadian ornithologist—the finding of a bird's nest which none, save perhaps an Eskimo, had ever seen. During the search which lasted intermittently from 1923 to 1929 an approximate distance of thirty thousand miles was covered. Early writers on bird behaviour gave as their opinion that blue geese nested at the back of beyond or somewhere within the shadow of the North Pole. They were not so far out in their guess.

While the northbound route of the Blue Geese has not been so clearly defined as that of the Canada and the Snow, it is apparently restricted to a narrow corridor in mid-continent. For long it was supposed that these birds made a non-stop flight between Louisiana and Manitoba; but, as the late Burt Gresham pointed out in *The Beaver* for March 1939, they are known to stop for rest and food in Iowa, Missouri, and North and South Dakota. No mention is made, however, of the size of the flocks halting at these intermediate points. Few of the migrating birds are encountered in western Canada except in a small area of southern Manitoba, where normally they arrive early in April.

An excellent concise record of their course from thence to the breeding grounds comes from Roy Ross, formerly HBC post manager at Attawapiskat on the west side of James Bay. He writes:

"The Blue and Snow Geese fly from the marshes west of Lake Winnipeg northeast to Attawapiskat and from there mainly to the neighbourhood of Moose Factory. For about ten days they fly back and forth between Ekwan Point on the Bay, north of Attawapiskat, and Moose Factory. Finally most of the Blue Geese go round by Moose Factory, taking the east coast of Hudson Bay en route to Southampton Island and Baffinland. The Snow Geese and a few of the Blue travel by the west coast of the Bay to Cape Henrietta Maria."

In a bulletin, *The Blue Goose*, issued by the Department of the Interior at Ottawa, Mr. Soper says that the birds arrive on Baffin Island about the first week in June. Another breeding ground of the Blue Goose was discovered in the spring of 1930 by Dr. G. M. Sutton, ornithologist, on Cape Kendal, Southampton Island. Here, contrary to Soper's observations on Baffin Island, the Blue Goose and Lesser Snow Goose were found to interbreed occasionally. T. H. Manning, who visited both nesting areas in 1942 and wrote of his findings in the *Auk*, says only the female birds incubate the eggs, while Soper maintains that the males also take turns on the nests.

The Blue Goose, whose body plumage is not really blue but leaden coloured, has a white head and neck and in size and build bears marked resemblance to the Snow Goose. In fact, it was for long supposed that Blue Geese were Snow Geese in juvenile plumage. Like all other geese it is entirely vegetarian in habit and is expert in the nibbling of grass. Raising a brood of from four to six goslings, the birds leave the Arctic zone in early October and, aided by a favouring wind, may possibly span the continent from north to south in one sustained flight.

Doubtless in time, and in all probability from someone in the service of the Hudson's Bay Company, we shall learn much more about the doings of the Blue Geese in the remote land of their nativity. That they continue to hatch their broods successfully and in large numbers is manifest from their abundance in winter quarters on the delta of the Mississippi River. There one observer mentions having seen an area five miles long by one mile wide covered with these geese all standing as close together as they could get.

If there be any bird in Canada to which the Hudson's Bay Company might well lay special claim that bird is surely Ross's Goose. Described quite accurately by Samuel Hearne at Fort Prince of Wales—he called it the Horned Wavey from the numerous warts on the bill—nearly a century elapsed before this little goose received a name. In 1861 Chief Factor Bernard Rogan Ross sent specimens of this goose from Fort Resolution, Great Slave Lake to the Smithsonian Institute in Washington, following which it was named in his honour.

Roderick Ross MacFarlane, then post manager (1861-1866) at Fort Anderson, hunted far and wide in search of the nesting place of the Ross Goose, but without success. This great naturalist, for such he proved, sent thousands of wild birds' eggs to natural history museums, but amongst these was no egg of the diminutive goose bearing the name of Ross. In fact until almost the day before yesterday the breeding ground of this bird remained a baffling problem to all ornithologists. In 1925 A. C. Bent, compiling his monumental work on wild fowl of North America, stated frankly that absolutely nothing was known about the breeding habits of this bird in a wild state, adding significantly, "This problem is likely to remain for long unsolved."

Yet solved it was, and that appropriately by men of the Hudson's Bay Company. On July 2nd, 1940, Angus Gavin, post manager at Perry river on Flagstaff Island (lat. 67.45 north, long. 102 west), together with Ernest Donovan, discovered the long sought nesting place of the Ross Geese. The birds were found nesting on small islands in a lake forming the source of the Perry River. Four eggs, creamy-white and ovate, were the most common clutch noted, incubation being then from five to ten days advanced. (See *The Beaver*, December, 1940.)

Ross's Goose is a comparatively small bird, in fact it might well be termed a pocket goose. About equal in size to an adult male mallard, the average weight being less than three pounds, the wing spread of fifty inches seems small when compared with the Canada Goose expanse of almost six feet. The plumage is snow white over all parts except the wing tips, which are black. A reddish tinted bill dotted with small knobs on the upper surface serves to distinguish the bird from all other geese. In addition to the name bestowed upon it by Samuel Hearne, the Ross Goose is in some quarters known as "galoot" and as "scabby-nosed wavy," nasty derogatory names quite unsuited to a very pretty bird of the northland. Wintering in California, the Ross Geese are much more silent in flight than the Snow Geese with which they frequently associate.

Since the days of Samuel Hearne much has been learned about the wild geese which come and go with the seasons and with such unfailing regularity. For long we have known where their winters are spent and recently in high north latitudes the curtain has been lifted from the nesting place of many of their kind. Yet no conclusive answer has been forthcoming to the question of why geese migrate. The custom is an expensive one but over against the long and arduous journey to and from the Arctic there is of course the certainty of undisturbed sanctuary, of abundance of food for themselves and for the goslings, and of a summer season, brief as it may be, in which the sundial functions both day and night. In conclusion it is meet that tribute should be paid to men of the HBC who live and travel in the zone where the native geese build their nests. But for them the whereabouts of wild fowl nurseries of the Northland would in large measure still remain shrouded in mystery.

Ross's Goose on her nest at Perry River. Angus Gavin.

Above—Snow Goose leading her goslings

Below—Anchor of Blue Geese

Above and below—Blue Geese

ARCTIC AIRFIELD SURVEY

by Frank H. Ellis

Craig Harbour, where the most northerly airfield in the British Empire was surveyed in 1922. The picture shows supplies from the "Nascopie" for the R.C.M.P. post being landed there in 1938. Lorene Squire.

ALONG a flat stretch of shore, on the barren southern coast of Ellesmere, Canada's most northerly island, stakes were driven in 1922 which may be intact today, marking the surveyed site for what was then, and still is, the Dominion's farthest north airfield. Situated only 830 miles from the North Pole itself, no airplane has yet settled to a landing upon its rough, unimproved surface; but the possibilities of aircraft operation in and over that Arctic area were clearly foreseen as a probability when Major R. A. Logan, of the Canadian Air Force, was authorized to go north as a member of the 1922 Canadian Government Arctic Expedition.

Through the recommendation of J. A. Wilson of the Air Board, and the efforts of O. S. Finnie, director of the Northwest Territories, the airman was included in the personnel of the expedition with instructions to look into conditions as they applied to flying in the Arctic, and to establish aircraft landing sites in the far north, particularly at points on the northern tip of Baffin Island, and on North Devon and Ellesmere Islands.

The actual purpose of the expedition, the first such Canadian journey to take place after the First Great War, was for the establishment of Royal Canadian Mounted Police posts on the islands north of the mainland. Information had seeped out of the Arctic that trading companies of various nationalities were operating in that area, and the protection of the law for both native and game populations was considered a prime necessity. The murder of a white trader named Janes by natives was also proof enough that the police were needed in those latitudes to instil a little discipline into the indigenous population as well. A voyage for the purpose was scheduled to leave in 1921, but due to various causes it did not get under weigh.

The officer in charge of the 1922 expedition was J. D. Craig, D.L.S., and in command of the C.G.S. *Arctic*, in which the trip was to be made, was Captain J. E. Bernier, F.R.G.S., well known for his earlier voyagings in Arctic waters.

Even at that date, the ship herself had quite a history. A three-masted schooner, built solidly of oak and pine, her keel first tasted salt water in the Baltic, when she slid down the ways of the Howaldt shipbuilding yards at Kiel, early in 1901, to be christened the *Gause*.

Although not a large ship, she registered 650 gross tons, with a length of 165 feet and an outside beam of 37 feet; she was of staunch construction, and on her first cruise to the Arctic she carried Dr. Cook and others of his party.

Later she was purchased by the Canadian Government, and re-named *Arctic*, to make several trips north before the outbreak of World War I.

From 1913 to 1921 her duties, though modest, were of great responsibility, and as *Lightship No. 20* she rode out her years of exile on the Lower Traverse of the River St. Lawrence, under control of the Department of Marine, Transport Division.

At the conclusion of her period of banishment, she was withdrawn from that vital service and overhauled for the use of the 1922 Eastern Arctic Patrol.

Also aboard her when she sailed from King's wharf and out of Quebec harbour for the North was a detachment of nine men of the R.C.M.P. under command of

Inspector Wilcox, a ship's crew of five officers and twenty men, together with L. O. Brown, D.L.S., of the Geodetic Survey (who also acted as official meteorologist), Medical Officer Dr. L. D. Livingston (of Aklavik agricultural fame), W. H. Grant, of the C.N.R. staff, as secretary, and G. H. Valiquette, official photographer—a total personnel of forty-three.

When she got under weigh on July 18, 1922, she carried in her holds 500 tons of coal for the use of her auxiliary, triple-expansion steam engine, with an additional 25 tons as a two years' supply for the planned police posts. In addition there were 225 tons of lumber for construction of the proposed posts, and 75 tons of mixed cargo of equipment and supplies—in which was included sufficient for an emergency stay of two years, just in case the ship might be trapped in Arctic latitudes and there be forced to winter.

After a number of minor engine breakdowns, due to the short time her engineers had been given to put things in shape, they got well away, and there is little doubt that the good ship heaved a creaking sigh of relief as she slipped jauntily past the Lower Traverse on the St. Lawrence under full sail, happy in the knowledge she was not to ride at anchor there again to add more time to the seven, long, wearing years she had already spent there so faithfully.

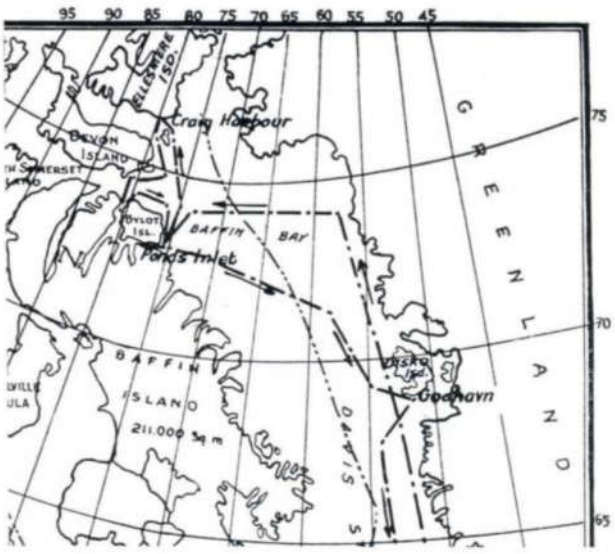
On August 2nd Captain Bernier identified the Greenland coast 45 miles away, sighting the 4,710 foot heights of Mount Umelik in the early forenoon. Beyond could vaguely be seen the vast, overwhelming ice cap which spreads almost entirely over that great island. The going was slow, due to ice aplenty, and on August 8 they were forced to a stop, being completely hemmed in.

By August 15 the ship was forging steadily across Baffin Bay, with the intention of reaching Pond's Inlet. But the entire inlet was still solidly icebound, and they were forced to heave to several miles from their destination. A whale boat manned by Eskimos soon was seen working its way slowly through narrow leads from shore, and coming alongside, its passenger, Mr. Caron of the Arctic Gold Exploration Company, a nephew of Captain Bernier, came aboard. As it was impossible to unload the material earmarked for Pond's Inlet, a consultation was held, and later Mr. Caron was dispatched to the Hudson's Bay post with a message for Inspector Joy, R.C.M.P., who had arrived at Pond's Inlet in September 1921 to investigate the murder of the trader Janes. Joy later came to the ship and the decision was reached to go on to Ellesmere, and call at Pond's Inlet on their return.

The intended police post on Ellesmere had tentatively been planned for establishment at a point on Fram Fiord, but little was known of the area. The island had been unpopulated for many years, as the indigenous population had left the area several years previously, when whalers of different nations had hunted in those waters. In view of this, a party of Eskimos with their belongings and dogs were taken aboard the ship at Pond's Inlet, pitching their tupiks and living on the fore deck of the ship during the journey.

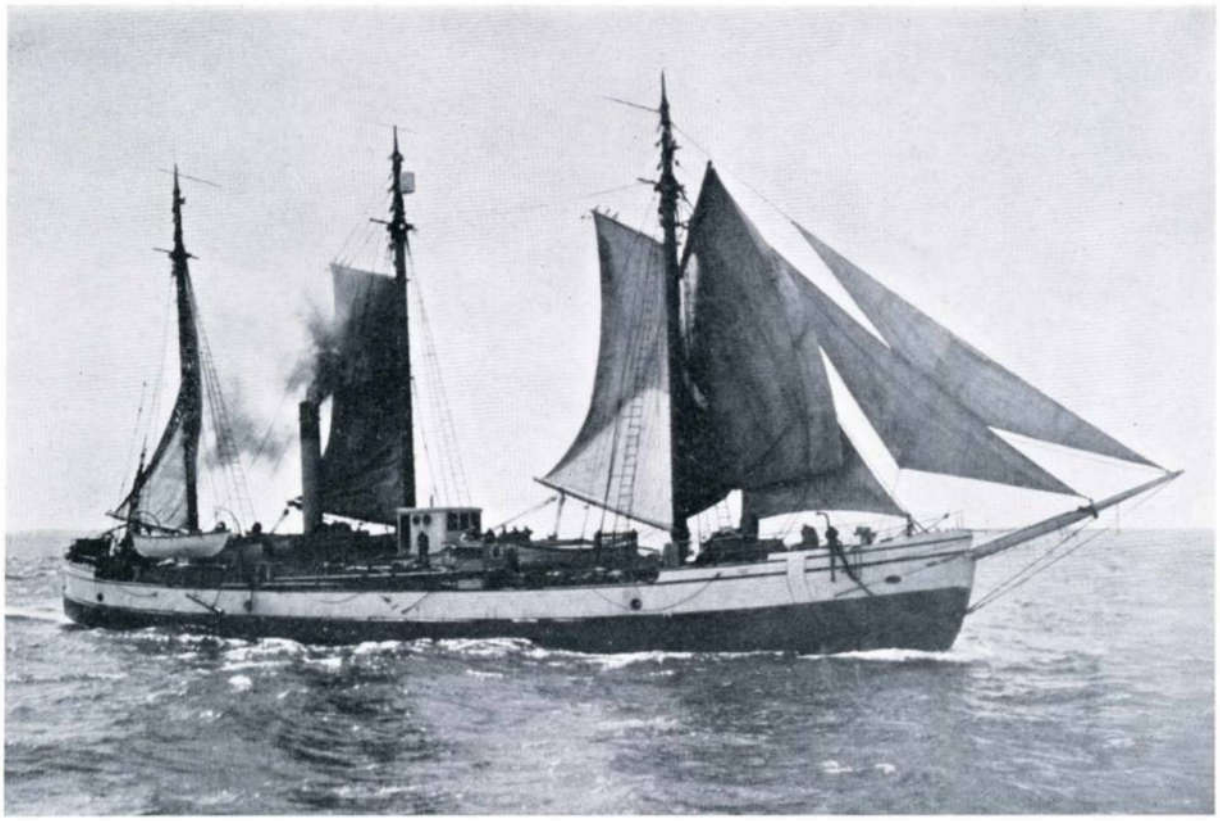
Their presence on Ellesmere was a prime necessity, as their assistance to the police would be invaluable, and they had been persuaded to stay there for a year.

Fram Fiord was also found to be completely icebound, and after battling up and down the coast through heavy ice, a small harbour was selected on Smith Island from which unloading of supplies could



The northern part of the "Arctic's" route in 1922.

Above: Capt. J. E. Bernier, famed Arctic navigator and skipper of the "Arctic," comes aboard at Quebec. Below: Inspector Wilcox, R.C.M.P., and J. D. Craig, in charge of the Government expedition, on board the "Arctic."



The Canadian Government steamer "Arctic" under sail.

proceed, and a party was sent ashore to select a suitable site for the buildings to be erected.

In honour of the officer commanding the expedition, the tiny inlet was named Craig Harbour by Inspector Wilcox and Captain Bernier.

There on that lonely, barren spot, the police post began to take shape. It is a desolate land. No vegetation is to be seen there but moss, and animal life on the island seems non-existent. However, the job had to be done, and by August 28 all the material and equipment to be left there was ashore and the buildings were fast taking shape.

While this was going on, Logan surveyed the beach at the head of the harbour, and also the tablelands above. Being a Dominion land surveyor, the major was well fitted for the job, and he finally selected a suitable site for an airfield on the low lying beach.

In accomplishing this work he had the honour of setting out the most northerly landing field in the British Empire, which record it undoubtedly still holds today. At that time it was also the farthest north in the world, being situated in latitude 76° 10′ north. Discussing it recently, the airman mentioned it was big enough at that time, but that would not be large enough for the huge planes of today.

Major Logan had been entrusted with a large Canadian Air Force flag to take along, in design exactly like the Royal Air Force flag of today, and to put an official, finishing touch to the whole affair, the flag was raised on a suitable pole with all due ceremony, and there left flying proudly in the wind.

The crowds there to watch the unfurling of the most northerly point at which the R.A.F. emblem had then flown, made the dedication ceremony a record of its kind, not because of the multitude which looked on, but for the lack of them. The spectators consisted of Kakto, an Eskimo man, two of his children and the photographer.

Before the ship left, a bronze tablet was set in the solid rock, bearing the words, "Canada, N.W.T. 1," to mark the spot where the first such record was placed in Franklin district under authority of the Northwest Territories Branch.

Time was precious, thick ice was beginning to form at night, and as Captain Bernier realized that to delay was to court disaster, departure was speeded up, and with little ado Inspector Wilcox and his dauntless band of six men bade adieu to the ship's company. Climbing into their small boat, they rowed slowly away towards shore as a heavy snow squall swept out of the north—a threat of what was to come.

It isn't hard to realize the feelings of those seven police officers as the staunch *Arctic* slipped out of their sight just after midnight on August 28. Left alone to their own resources in a bitter land, cut off completely from the world for at least a year, all for the purpose of maintaining a British outpost of law and order nearer to the Pole than ever had been established in the Empire's history.

Pond's Inlet, when reached, was found to be still solidly bound by ice, and as the weather was bad, the captain was forced to seek shelter in Albert Harbour on Baffin Land, some eleven miles from the Hudson's Bay post at Pond's Inlet.

While at anchor there, the Hudson's Bay supply ship *Bayeskimo* arrived, and on September 6 both

vessels moved out and were able to reach Pond's Inlet at last, through heavy but broken ice.

The *Arctic* spent three days there, supplies and material being landed for the erection of the police post, and during that period Major Logan, scouting around afoot, located ample space for a large airfield site southwest of the Salmon River and a few miles west of the post. Several short, but suitable, runways were also selected just south of the post itself, and all sites were duly surveyed, marked off, and had complete reports written regarding them.

Before the expedition had sailed north from Quebec, an endeavour had been made to have a small aircraft included, to be taken north on shipboard; but after lengthy correspondence the suggestion had to be dropped as the Air Board did not have funds set aside available for such purposes.

It is a great pity the plan did not formulate, for any flying done in those high northern latitudes would undoubtedly have had great influence in the penetration of those areas by aircraft years sooner than actually took place; but it is very probable that, even without the use of a plane, the report and recommendations of Major Logan undoubtedly played an important part in the plans which were put into effect in 1927, when a well equipped aerial expedition operated by Government orders in the area of Hudson Strait. (See "First Flights Over Hudson Strait," in *The Beaver*, March 1944.)

In those Arctic latitudes, winter sets in when only the first nip of fall is in the air along Canada's southern border, and knowing this only too well, Captain Bernier had no desire to be caught napping and forced to winter there.

By 4 p.m. on September 7 they had completed the work, and the anchor was weighed immediately. The "Mounties" to be left there went ashore, and with a salute of three long blasts of her whistle, the *Arctic* moved out of the inlet for the return journey south. They left only just in the nick of time. Fifty-nine minutes later the inlet filled in tightly with heavy ice, to remain solidly frozen until break-up next year.

In connection with the flag raising ceremony at Ellesmere, it is official fact that after the return of Major Logan to Ottawa, the source from which the flag had been procured asked for its return. As it was left waving so proudly over the Arctic wastes, the request was a bit staggering; and although fortunately there is no further record of what took place, it can readily be imagined that when the airman was pressed further, he suggested they go to a much balmier climate than the Arctic—despite the fact that he well knew they would not find the flag flying there.

During 1933, Major Logan returned to the same areas in charge of a ship which served as a supply base for Colonel and Mrs. Lindbergh during the flights over Labrador, Baffin Land, Greenland and Iceland, and during that time Logan accompanied the American airman on several flights along the west coast of Greenland, where a number of suitable landing sites were spotted.

Major Logan's knowledge of the area and its potential possibilities for landing fields was realized by both the Canadian and American governments when events during the present conflict made it imperative to at once establish airports in Greenland and other way points between America and Europe.

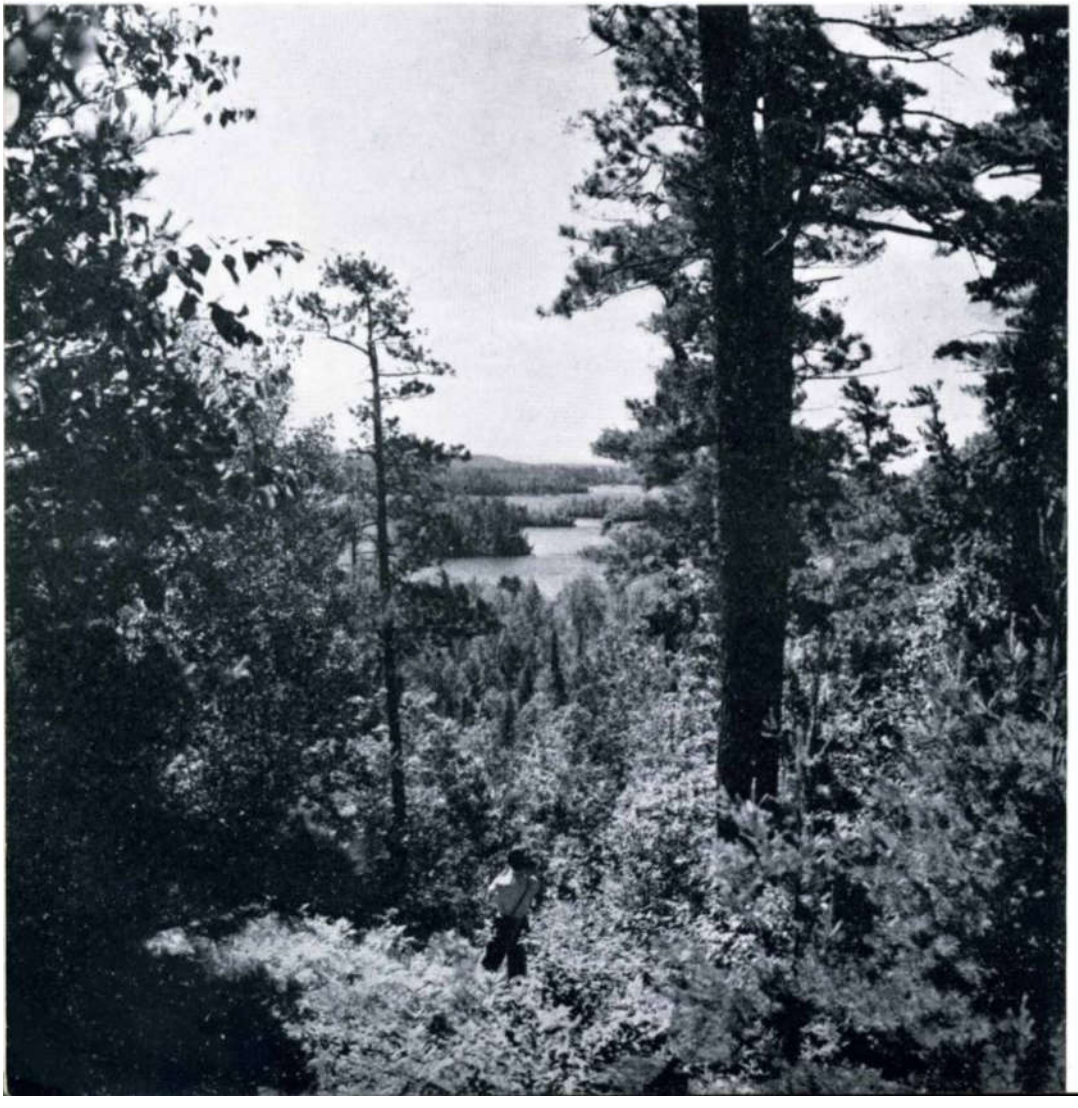
Then serving with the R.C.A.F., he was called into action to work with American authorities, and for three months he helped to relocate sites spotted during 1933, at points which are now vital U.S. army air bases in southern and western Greenland.

Early in the summer he was called on again to go north, and as a passenger in a U.S. Army B-24, he assisted in the planning of air base locations in the Ungava Peninsula, Akpatok Island and southern Baffin Land. Later the same year he spent some time in Alaska on similar missions, and actually had orders to carry on across Arctic Siberia to Moscow; but the Russian authorities decided against the project, as they would not allow the plane to operate over Russian territory, probably due to the fact that they were on neutral terms with the Japanese government, and wished no complications to crop up.

Due to injuries received about a year ago while surveying air base sites in the south Pacific, Major Logan is now on the retired list, but many of the great air bases which now exist are a fitting monument to commemorate the work in which he had such a large initial share.

It can well be understood that, although the original 1922 search for northern airfields was somewhat barren of results, it had through its small beginning very far reaching effects. In the end that original expedition became indirectly responsible for the formation of the chain of landing fields between the New and the Old World, an undertaking which proved such a tremendous influence in the successful passage of many types of aircraft to Europe, which finally helped to wipe the German Luftwaffe from the skies.

Major Logan and Kakto display the Canadian Air Force flag at Craig Harbour.



TEMAGAMI in Northern Ont
as the northern lake par ex
to clear deep water, myriad bay
evergreens, trout and bass and
pines that soar into the cloudles
woods where the air is fragrant w
it is easily reached by both road
managed to preserve the beauty

These photographs were take
the far-flung lake, where the Co
Indians for seventy years, and
became known as a paradise for

Above, left to right: 1. From the t
from Temagami station to Bear Island, th
between pine-clad shores and islands.
Island. On the right is the building housi
manager's small son and a dusky friend
many camps along the lake's 2000-mile sh

Left: From the hill leading up to the f
of the sapphire lake studded with green i
ing barge nears the Company wharf with a

Summer at Temagami

tario is known to thousands of city dwellers
cellence. It has rocky shores sloping down
s and islets clothed with white birches and
muskies lurking in shadowy depths, great
ss blue, trails that lead away into the quiet
vith the scent of spruce and balsam. Though
and rail, this forest sanctuary has somehow
and freshness of the virgin wilderness.
en recently at Bear Island, in the centre of
npany has been supplying the needs of the
of the white visitors since Temagami first
campers and sportsmen.

p deck of the fast motor launch that brings the visitor
e northeast arm stretches away for nearly twenty miles
2. The launch approaches the Company dock at Bear
ng the canoes which are rented to campers. 3. The post
outside the Company store. 4. Girls from one of the
horeline leave the store with their purchases.
ire rangers' lookout tower, one gets occasional glimpses
slands. Below: All the modern conveniences! A land-
good load of freight.

Above: The post manager, Ernest Bates, and his family in the garden of their modern home. Right: Mrs. Bates and son Tommy gather flowers in the garden.

Photos by the editor.

An old Indian and his wife and dog leave English River post for a winter in the bush.

ENGLISH RIVER HERMIT

Story and Pictures
by J. L. Charlton

SOMEWHERE in the bush, less than thirty miles from Trans-Canada Air Lines' landing field and radio station at Pagwa River is an Indian—whom we shall call Mandayoh (stranger)—living alone, and off the country, as his forefathers did centuries ago; lacking any contact either with the outside or with his own kind, and still but a day's journey from both. A man who doesn't know there are such things as electricity and radio; let alone any comprehension of what they effect. A man who, if he is aware of the war at all, must have only the slightest conception of it.

Most Indians, despite—or more likely because of—their lonely lives, are a gregarious people, and try whenever possible to retain small family or partnership units even at advanced trapping camps. The case of Mandayoh then is unique. The story of his isolation goes back some twenty-five years, when at their trapping grounds his wife died suddenly and, to everyone, unexpectedly—therefore mysteriously. Whereupon circulated a whispering campaign which, whether ill-intended or not, culminated in Mandayoh taking to the bush and staying there.

For some three years nothing was heard of him, and while at first there had been the constant prospect of his return to our trading post at English River, it later became the considered opinion he had perished. Then tracks were found which proved he was still alive. From then on notes were left for him with assurance that all was well, he need have no apprehension of trouble, and he should return to his relatives. The notes were picked up, but no Mandayoh—until one winter he walked into the camp of an old couple, Abraham Puenish and wife, whose trapping grounds adjoined the area Mandayoh was known to be hunting.

The Puenishes deserve mention. Abraham was one of our best hunters. His wife, when a young woman, had lost her baby, and this affected her mind. It was found that the gift of a large doll humoured her. She cared for it, making new dresses for it, and carrying it around in the regular Indian cradle. This perhaps would be pathetic, were it not that Mrs. Puenish is withal a cheerful, tidy, thoroughly nice person, and normal in every other respect. Mandayoh, though, was aware of this eccentricity, and I believe chose the Puenishes as intermediaries for the obvious advantage he would place in the woman's childishness. When others had tried to meet him he evaded them, and as the Puenishes said he was well, they soon gave up; and in fact as time went by became afraid of meeting him.

Finally about 1926, of his own accord, Mandayoh came into the post. He only stayed a short time. He would listen neither to advice to stay, nor offers of assistance; but furtively procured a few items and decamped. This visit was repeated a few months thence; but from that time to this he has not again ventured out of the bush.

We first heard of Mandayoh in 1934. Naturally we were interested in meeting him, and did our best to have him visit the post. The Indian Affairs Branch also were concerned lest he still imagined he would be in trouble if he came out. So we kept on each year sending word to the contrary, both verbally and by letters in syllabics via the Puenishes. It was pointed out to him he could utilize river conditions during freeze up or break up to come into the post to be immune from outside interference—if that was what he was afraid of—but there never was any satisfactory answer.

From what little I learned of Mandayoh's living habits, I found it remarkable the way he demonstrated self-sufficiency in the bush—something we all hear of, but rarely actually encounter. More so perhaps in his

first years of segregation, when I understand he had an axe and a tea pail, and nothing else.

When he began to live alone, he built a basket type fish trap in the river, used bow and arrow extensively (this certainly being not unusual—the Mattinnas brothers used bow and arrows to good effect on moose and deer during several winters), got moose, and thereby skin clothing, meat, and rawhide; and used the same rawhide to snare, amongst other things, more moose. (A clear case of *pro pelle cutem!*)

Small fur bearers caught in deadfalls gave him some food, fur, bone for needles. Bark, berries, and leaves of trees provided medicine and even tea and tobacco, of sorts.

The very meagreness of his requisitions in the early years showed that he needed very little to augment what he himself could procure. Herewith in strict order of preference were his wants: (1) Files, (2) underwear, (3) cooking kettles, (4) tea, (5) beef fat. Anything else was actually unnecessary. Note that no matches were asked for. We must presume he had one or two axes. The files he used for everything under the sun—from making arrow points to ice skates. (For a bizarre spectacle of this day and age, I give you Mandayoh, dressed in buckskin, carrying bow and arrows, skating down a river in early winter!)

We found, though, that the wild man mellowed or softened through the years. He was glad to get the more regular kind of supplies; and as well as the foregoing, No. 9 holland twine, matches, white liniment were specifically asked for, while oatmeal, clothing, and other tobacco—and in fact all the various goods any hunter asks for—were packed for him.

The procedure in this respect varied little. The Indian Affairs Branch had authorized the supply of neces-

English River Indian hauling his toboggan.

Mrs. Puenish and her doll baby.

sities; and he did send in some fur. This latter was more a gesture than anything else. They were invariably inferior skins, and worth little. He would leave these at some well marked cache on the Puenishes route in the spring, to be brought in to us in the fall. Abraham and I would figure what we thought would be the most useful supplements to his note of supplies; the goods would be put up with the same note for him to come into the post; and the Puenishes would freight them upstream to be left at the cache.

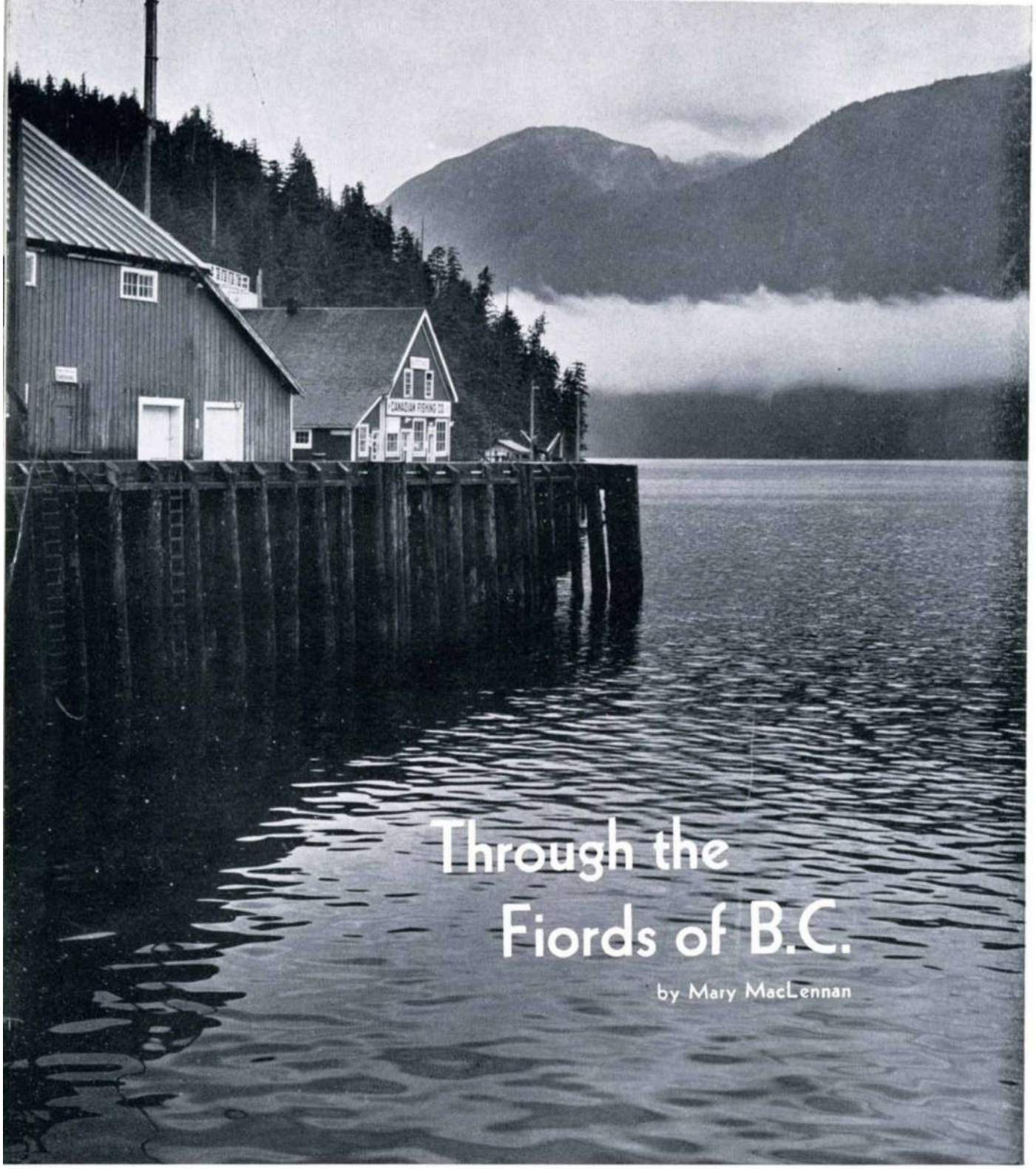
Sometimes, but not always, Mandayoh would meet them there, and addressing his remarks only to Mrs. Puenish, would speak of the weather, and the scarcity or otherwise (almost never otherwise) of game. But in general he had little to say. I sent magazines to him, but he showed no interest in other news, and although he had once or twice seen the Puenishes during the winter, usually they would not see him again until the following fall. Thus this annual contact with the Puenishes has been his only link with his kind through all the years. Whether one of these winters there will not be found any tracks in the snow, nor fur in the cache, or whether Mandayoh will come from the bush to live amongst the others—well we should soon know. Mandayoh is getting well on in years, and his life must be getting increasingly difficult to sustain alone.

I have often thought of him: in the winter, when the temperature hit some thirty or forty below, and a gale swirled around the buildings, holed up somewhere by some creek to the south; or on a fall evening, of his crouching by a lazy fire, with the smoke from the smoldering poplar gently eddying up amongst the fish and meat on the racks above.

On that last visit to the post, he was represented as being in good health, but very nervous; doing everything in rapid motions and in great haste to get back up the river. It happened he landed at the little settlement when there was a mild 'flu making the rounds. He had immediately asked for absorbent cotton. This he at once stuffed up his nostrils—to keep the white man's bug out—which as Dr. Orford remarked showed a certain amount of prescience.

Meanwhile if you are either in a C.N.R. train, or better still a 'plane, look out about half way between Hearst and Nakina. There, within the visual area of trees and rivers taking north, you can wonder how Mandayoh is faring in this year 1945.

And he too, doubtless, does considerable wondering about the selfsame huge, silver, "white man's goose" winging overhead.



Through the Fiords of B.C.

by Mary MacLennan

Nearing the wharf at Butedale.

All photos by the author.

THE lure of the sea is an old one. But with travel restrictions in force everywhere in wartime, and many of our luxurious ocean liners imbedded in sand on the floors of the oceans, the outlook for ocean travel has not been a bright one for those with the urge. Glancing one day through a leaflet, I came upon the description of a leisurely, round-trip cruise of 1200 miles through the fiords of British Columbia via Bella Coola. My mind was made up. This was the trip for me. Until this moment I had scarcely realized that some of the finest fiords in the world were to be seen practically at my own back door. Plans quickly materialized, and the first day of July found us in Vancouver boarding the boat.

"Visit British Columbia, the Vacation Land That Has Everything," was the title of one of the travel booklets I had tucked away in my suitcase. The truth of this statement was evident from the outset.

Across the harbour from the great modern city of Vancouver stood the noble mountain peak called "The Lions," for on its summit are two rock formations resembling two large lions at rest. From this well known point north to the "pan-handle" of Alaska, the coastline of British Columbia proved to be one maze of deep fiords and towering mountains, thickly timbered, many of the higher ones covered with snow even in July. The sea has come in and flooded the valleys, and the rugged mountains rise abruptly from the water. There are but two other places in the world with a coastline such as this, Norway and southern Chile; but, unlike Norway, these fiords are never frozen over in winter, because of the warm Japanese Current. Because of this warm current and the high coastal range, the coast of British Columbia has a mild year-round climate, and the steep mountains are covered with dense vegetation and forests.

A beautiful sunrise on the water came into view through my porthole as the first morning out from Vancouver brought us half way up Vancouver Island to Campbell River, famed salmon fishing centre and home of the huge Tyee salmon. Campbell River is the headquarters of the Tyee Club, where anglers from every corner of the globe have come to try their skill with the rod. The Tyee, largest and most powerful fighting fish in this section, range in weight from a few pounds to as high as sixty, with the average being around twenty-two. Along with these are found the Cohoe salmon, which will test the skill and endurance of the hardiest angler. Besides Campbell River, good Tyee waters are found in Discovery Passage close by, and fishermen find excellent trout fishing in Upper and Lower Campbell Lakes, and also north of Menzies Bay. A short distance away is another famed fishing ground, Forbes Landing, and one of Vancouver Island's most spectacular sights, Elk Falls. Here, through the midst of huge Douglas firs, Campbell River pours down the mountainside in a torrent, plunges down a steep 120 foot cliff into a pool, and then swiftly follows down a deep, rocky chasm.

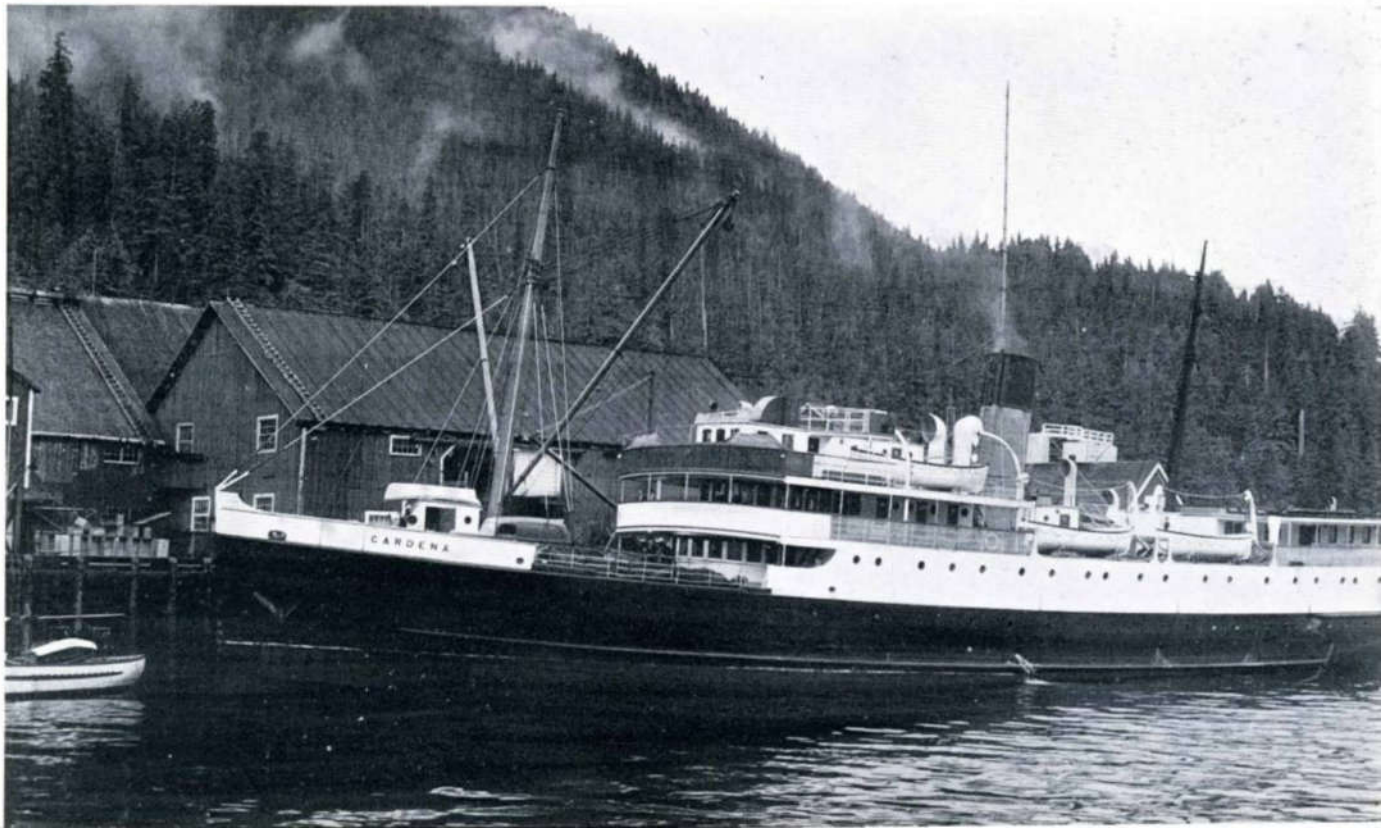
Only a short distance from these fishing grounds is a boiling cauldron of swirling waters known as Seymour Narrows, where the ocean tides rush through the narrowest channel between Vancouver Island and the islands off the mainland—the scene of many shipwrecks. Ripple Rock, which might be likened to the Lorelei Rock on the Rhine which, in German legends, lured fishermen to their doom, lies just below the surface of the waters and has snared many a boat pushed off the narrow channel by the swift eddying currents. Much time and money has recently been spent by both the American and Canadian governments on plans for blasting this rock, but it has proved to be too great an undertaking for wartime. This boiling mass of water is known to fishermen and mariners by the name of Eucluetaw, given to this dangerous passage by the Indians who believed that in its depths lived a wicked spirit, enticing sailors to their deaths. This writhing whirlpool is only still at slack tide; it is then the freighters, the tow-boats, the fishing schooners and the passenger boats slide through on their way up and down the coast.

A long stretch of smooth sailing through Johnstone Straits brought us to Alert Bay. Most of the stops on Vancouver Island were at fish canneries and small lumber camps, but Alert Bay, the site of an Indian reserve and fish cannery, is especially well known for its Indian totems, some of which are the finest poles extant. It is located on a small sheltered island near the north end of Vancouver Island; and in the Indian burial grounds, located just a few blocks from the wharf, we found a large array of these weird, fantastic native carvings.

Indians were to be seen everywhere. Women were working in the cannery, swarms of little Indian children came running down to the wharf to meet the steamer and run for pennies thrown by the passengers, and men were mending their nets and working on their fishing boats.

A short stop was made at the Finnish settlement of Sointula. By contrast with some of the Indian villages

The Union Steamship liner on which the author made her cruise.



Tourist's delight—red-coated Mountie, totem pole, and Indian.

we had seen, everything was immaculate. The small houses were neat and newly painted, with green lawns surrounding each dwelling. The beach was unlittered. Little blonde children came down with their parents to meet the boat and looked as if they were dressed in their Sunday best. It might easily have been a little seaside village in Finland.

Port Hardy, our last port of call on 300-mile-long Vancouver Island, was reached just as the sun was sinking in a blaze of crimson. After a brief stop at the cannery at Namu the next morning, the coastal steamer made its winding way into one of the longest, deepest, and most beautiful of all British Columbia fiords, Burke Channel. The mountains towered high above on both sides of the ship, the brilliant green forests of hemlock, spruce and cedar were reflected in the calm waters, and the boat glided along through this silent, green valley until the wharf was reached at Bella Coola, the southern entrance-way to the largest park on the North American continent, Tweedsmuir.

Fifty-four hundred square miles in size, and named for Canada's late governor-general, Lord Tweedsmuir, the park abounds with wild life of every description and offers wonderful fishing. It contains almost every variety of forest, stream, lake, plateau, and mountain scenery. A relatively recent discovery has been that of Mystery Falls, a river dropping 827 feet into a gorge, one of the highest drops in North America. The park contains giant grizzlies, moose, mule deer, wapiti, caribou, ducks, and geese.

Lord Tweedsmuir (John Buchan), who a short time before his death crossed this park from north to south, wrote:

> "I have now traveled over most of Canada and have seen many wonderful things, but I have seen nothing more beautiful and more wonderful than the great park which British Columbia has done me the honour to call by my name. Its five thousand square miles contain some of the loveliest lakes, rivers, and mountains on the continent; it shows every variety of North American game except the mountain-sheep; it provides a happy hunting-ground for the sportsman, the fisherman, the naturalist, and the mountaineer.
>
> "It is of historic interest, too, for there Alexander Mackenzie completed his great journey to the Pacific. I write these lines to invite nature lovers to this noble reserve and to assure them that they will not be disappointed."

On the southbound portion of this cruise I browsed through the passenger autograph book in the wheel-

Fiord scenery at Talleo. The blue vitriol in the tubs protects the fishing nets against the action of salt water.

The ship approaches the paper mill village of Ocean Falls.

house on the bridge of the steamer and came across the autograph of Tweedsmuir, inscribed on his trip when he had taken this same boat back to Prince Rupert.

The village of Bella Coola is located two miles up the ravine from the wharf, while Tweedsmuir Lodge, a base for sportsmen in this region, is at Stuie, about forty miles up the deep Bella Coola River valley where grizzlies are found in abundance. Many residents of the village and some Indians from the interior of British Columbia were resting on the edge of the long wharf as we came to a stop. The residents came down to meet passengers from the weekly steamer and to obtain supplies from Vancouver, while the Indians, whose appearance was as primitive as any I had ever seen, came down to ship hides to Vancouver.

In the distant background, towering high above the walls of this Norwegian-like fiord, could be seen tremendous mist- and snow-capped peaks, shimmering in the sunshine. The mountains in these fiords rise straight from the water's edge and often reach a height of 5,000 to 8,000 feet, while Mt. Waddington on the mainland near Alert Bay is 13,260 feet high.

Across the valley and built out over the water was a small cannery, Talleo. As it was Sunday, on the wharf waiting for us were a large number of Chinese workers who were off duty. Lined up, too, along the wharf were enormous tubs containing blue vitriol, used to store and protect fishermen's nets from the action of salt water.

After leaving behind us the valley of the Bella Coola, the steamer glided down Dean Channel and whistled as it neared Mackenzie Rock. What a thrill it was to hear at last that whistle warning us to be on the right side of the boat for this sight, as it was largely due to a desire to see this spot that I had decided to take this particular trip. The steamer slowed down and came as close as it dared in order that all passengers might get a good glimpse of this simple monument to a great adventurer. Here the intrepid Scotsman, Alexander Mackenzie, ended his historic journey across Canada in 1793, the first white man to cross the main body of North America, arriving on the Pacific twelve years before the Lewis and Clark expedition.

Within a few hours after leaving this impressive spot, surrounded by mountains covered with dark, impenetrable woods, which to me were almost hallowed

Mackenzie's rock and its monument.

Repairing nets outside a cannery.

by association with the achievements of this great explorer, the boat turned into another quiet cove and soon reached Ocean Falls, the location of the vast Pacific Mills Limited, where newsprint and other papers are rolled from pulp for the far corners of the earth. Here also is the Pacific Mills' huge sawmill. This town of several thousand persons is a modern industrial site with attractive homes, having well-kept lawns and brilliant flowers. Behind the town itself is the dam generating the electricity for these mammoth plants.

After stopping briefly at Bella Bella and New Bella Bella, two fishing villages located on islands at the mouth of Dean Channel, we passed by "Ghost Island," an ancient Indian burial ground. We were told that Indians (until recently) looked at this spot from the corner of their eyes because of the ancient superstition that every night the dead Indians arose out of their graves to hunt in the gloomy woods, returning to their graves at daybreak. Leaving this "haunted" island behind us, we worked our way through a maze of islands till we reached Millbank Sound, another open passage to the Pacific, where a Hudson's Bay post stood over a century ago.

Cruising on northward through Grenville Channel, a long and beautifully calm stretch of water, and stopping at canneries along the way in secluded coves, we saw many breathtaking panoramas. At every turn the scenery changed. Turbulent mountain streams tumbled down steep bluffs into the sea, dense growths of green spruce and fir, growing to the edge of the water, were reflected in mirror-like lagoons, and fishing boats on every side drew in full nets of salmon.

Stopping at the cannery at Butedale, a group of interested passengers were taken through the large cold-storage plant, where frosted fish were piled in layers to the roof and the temperature was 14° below. Most of us, clad only in light summer clothes, after only a few minutes of this stinging Arctic weather, joyfully clamoured through the large door out into a livable atmosphere again.

Before the steamer headed for Prince Rupert, the northern terminus of this cruise, it steamed up the tidal Skeena River, headquarters of British Columbia's salmon industry. The canneries of Claxton and Port Essington, built on piles jutting out over the river, were among those where stops were made. The river was dotted with small fishing craft, their mammoth nets spread out in circles and supported by cork floats.

The canning season was in full swing, and as we proceeded from cannery to cannery, we were fortunate in being able to see the entire process of salmon canning before our eyes, from the emptying of the huge nets to the final cooking process. The large salmon were carried up from the river in ladders, similar to the method of hauling logs into a sawmill. As we walked along from table to table, we watched the fish being cleaned, being cut up into various widths to fit the size of can, and pushed into the cans by hand before being taken away to the huge furnaces where the cooking process took place. Practically all these cannery workers proved to be Chinese and Indian women, and they worked swiftly, scarcely noticing the tourists in their midst. These canneries were scrupulously clean. Most of the women wore rubber gloves and men were almost constantly washing and scrubbing away debris from the work tables and floors.

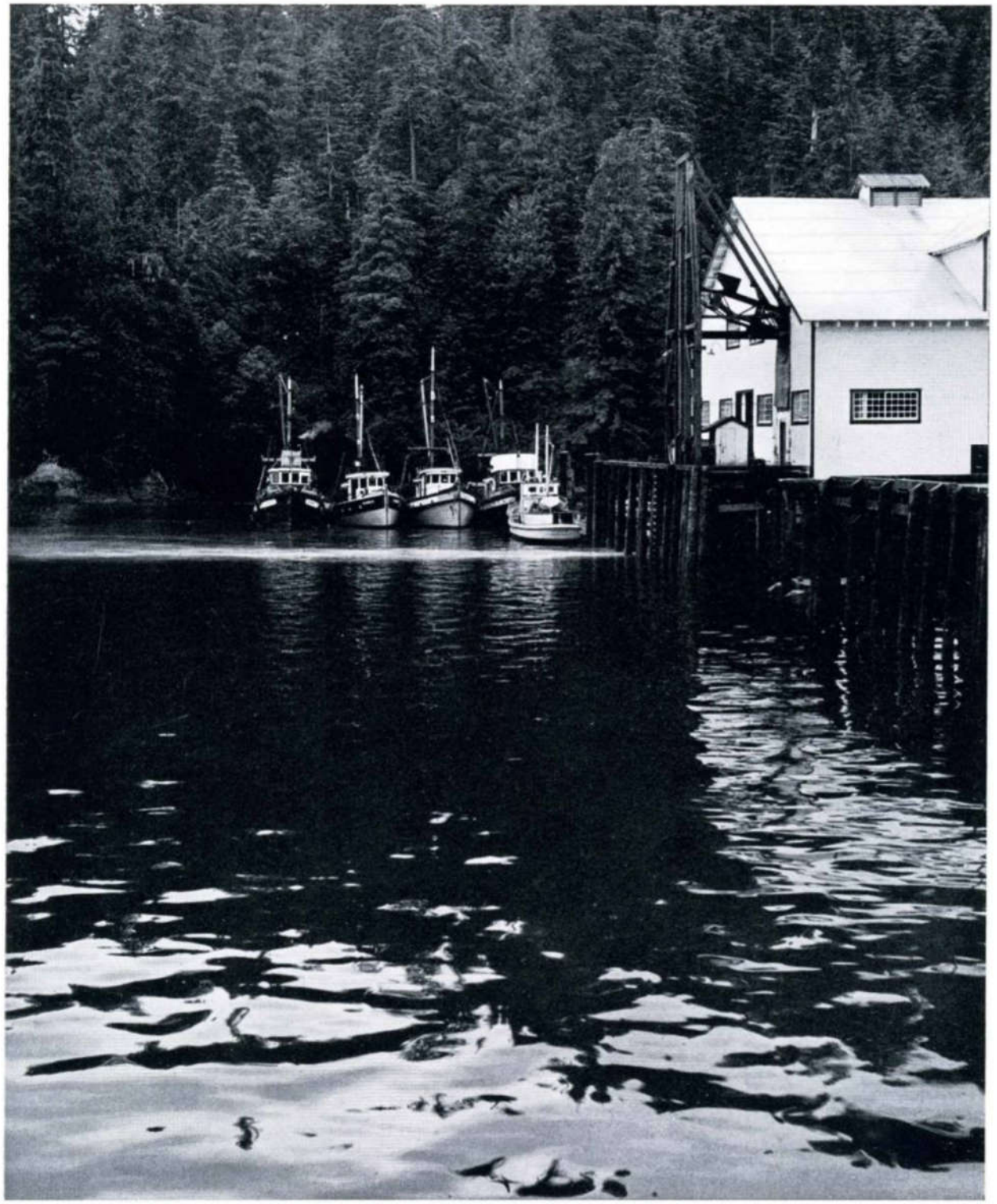
We reached Prince Rupert, the third largest coastal city in British Columbia and located near the boundary line of Alaska, late at night in a deluge of rain which, we were told, was a rather normal condition here and up the Skeena. Prince Rupert has an unusually fine harbour and a busy one, as it is the western terminus of the Canadian National Railways.

The city, named for the first governor of the Hudson's Bay Company, is built on an island of solid rock and is the capital of British Columbia's great fishing industry. It is the base of operations of the halibut fleet, is the centre of vast lumbering and mining enterprises, and has the world's largest fish cold storage plant, with a capacity of fourteen million pounds.

Prince Rupert being only half way up the coastline from Vancouver, I could begin to appreciate British Columbia's vast size, since Washington, Oregon, and California combined have fewer square miles.

A visit to this vast and sparsely settled country intrigued us with the potentialities of its great natural wealth, mineral resources, and beautiful scenery, and left us with a yearning for further explorations, perhaps into the interior, perhaps out to those aloof islands, the Queen Charlotte's—home of the Haida Indians, the creators in the past of exquisite black slate carvings which are now museum pieces. For those who love the sea and the out-of-doors, a cruise through these sheltered waters is a memorable experience, comparable in enjoyment to an ocean cruise, without the inconvenience of sea-sickness and with the added attraction of lovely scenery, interesting stops at out-of-the-way places, and congenial fellow passengers.

The green forest towers above these little fishing boats anchored in a sheltering inlet.



NORTHERN SALVAGE

How a young Canadian scientist located sunken Canol machinery at the bottom of Great Slave Lake.

by William Stephenson

THE captain of the barge train stood on the bridge of his sturdy little tug *Prospector* and shaded his eyes against the summer sun as he gazed across the wide reaches of Great Slave Lake.

"It looks like it's getting ready for a blow, all right," he said to the U.S. Army colonel beside him. "But now we'll have to take a chance on it."

Darkness had fallen and the convoy was twenty miles out on the treacherous lake when his grim prediction came true. A sudden storm burst upon the little fleet. Unable to stand up against the fury of the wind, the *Prospector* turned and started to drift with the waves, with the captain praying for the storm to abate before he was driven ashore. He was fearful too that his heavily laden barges might sink and drag the whole train down.

Time passed—slowly. The wind, instead of dying down, increased in fury, piling the barges up on top of one another, then jerking them savagely apart. Hawsers creaked and groaned. Rain pelted down and lightning flashed. At last, the captain knew that the storm would not die in time. Quickly, once his mind was made up, he moved to the stern, and with a steady sawing motion severed the tow-rope. Immediately the barges were swallowed up in the inky blackness.

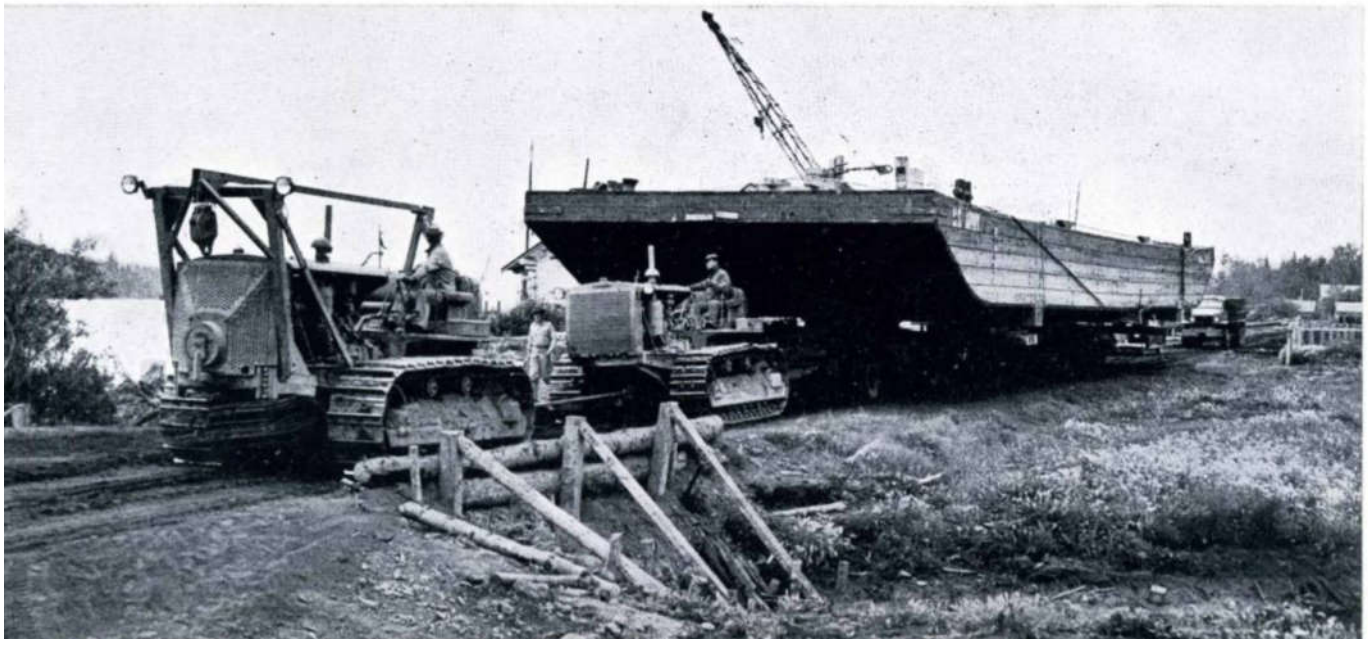
Guided by the faint light from the government harbour at Burnt Island, the captain swung his ship around to the lee side and dropped anchor. When morning came he proceeded to the south shore and scouted for the barges. They were all there, tossed high on shore—but their cargoes were missing. Ruefully he noted his losses: seven twenty-ton tractors, two bulldozers, great quantities of oil, gasoline, food and other materials up to a total of a cool quarter of a million dollars. The Canol Project at Norman Wells, on whose oil output part of the strategy of the war against Japan depended, had taken a serious set-back.

It was over a month before the contractors, Bechtel-Price-Callahan, an American firm, decided that it might be feasible to try and recover the equipment. Then, in the middle of September 1942, the National Research Council of Canada, situated in Ottawa, received a high priority request. Could they help to find and recover the valuable machinery from the bottom of the lake?

The Division of Physics and Electrical Engineering, to which the query was given, thought they could. They knew of several methods which might be tried at least, but would not commit themselves on the likelihood of success until they had studied conditions in the area. There was a new piece of equipment, for example, which, although still on the secret list, was being used for other purposes, and might turn the trick. A hurried call was put through to Pictou, Nova Scotia, where two young physicists from the Research Council were even then engaged in important work for the Royal Canadian Navy. One of these was instructed to report back to Ottawa immediately, for work on Great Slave Lake.

By September 26, a week after the call had been received, Claud Kitchener Jones, Regina-born scientist, aged 25, was on his way to the North. With him on the train was the device which he hoped would locate the tractors. Set up for use, it looked very much like an average-sized ice-cream container. In simple terms it was a double magnetic coil wound about a piece of non-magnetic metal. The impulses it picked up were carried by cables into a heated trailer where an amplifier increased the impulses to such a level as to be recorded on a meter. This device had been invented by Jones, and had already been used to locate several live torpedoes in Bedford Basin near Halifax.

Giant tractors like those lost in Great Slave Lake hauling a U.S. Army barge over the Fitzgerald-Smith portage. Caterpillar Tractor Co.



Towed behind a boat or tractor, the machine would detect any magnetic metal within sixty or seventy feet. The Esterline-Angus meter inside the heated cabin, where it could be watched continuously by an operator, registered the vibrations within the detecting device, recording them at a uniform rate on a continuous paper scroll. Any large metal object in the vicinity would cause a great irregularity on the scroll, which would be immediately seen by the operator, or if missed, could easily be traced back by means of a simple calculation.

Since the lake was not likely to be much deeper than seventy feet, and the chances for other large bodies of metal in the vicinity were small, there was a good chance that this delicate instrument would locate the equipment. Raising it, of course, was another matter, but one which could be dealt with when the time arrived.

Reaching Fitzgerald, about two hundred miles south of the lake, the young scientist was hospitably received by a detachment of the U.S. Army which was stationed there.

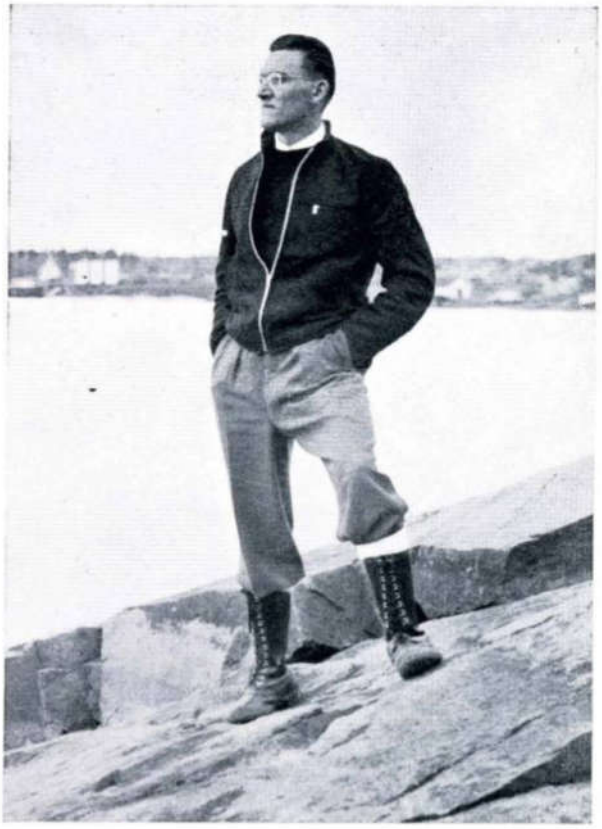
Two weeks of delay ensued, while they waited for equipment to arrive. Winter was coming on, and they had little winter gear. If they were to do any searching before the freeze-up, it would have to be done quickly, they knew. It was a tough break, but most of the transportation facilities were being put to use to carry pipe to Norman Wells. At last the barge they were waiting to use arrived, and they started down the river towards Resolution and open water.

At Resolution, a square steel barge was added to the convoy, and on the deck of this vessel a tractor, to be used in the general salvage operations, was lashed. From this point it was only a short jaunt to Burnt Island, and with a calm lake to sail on and a fine October sun in their eyes, the journey was accomplished uneventfully. Arriving there at dusk they anchored close to shore in quiet water.

They were awakened abruptly three hours later by the pounding of the terrific waves which had suddenly come up. Their anchor had slipped and they were being driven swiftly in against the rocks.

As the captain of the *Prospector* had done, they quickly cut their tow line, started the motor in their personal barge, and frantically tried to get the nose about. They saw the barge pile itself high and dry on shore. All that night and all the next day they circled the island trying to keep out of the wind, but in the end they were caught in a cross current and had to give in. Violently seasick and drenched to the skin, they left the barge and managed to get ashore by means of a small boat. They circled the island, on foot this time, until they came to where the other barge was located. The sight of the tractor on board gave them an idea. Quickly they started the motor, drove it off the deck, and began to make a bee-line for their anchored barge, which was still being tossed about like matchwood before the gale. It was the work of only a few minutes to get a line out to the man still aboard, make it fast and with the aid of the tractor, pull the second barge high up on the island.

More bad weather followed. With sinking hearts they watched the steady downpour of rain which continued day after day, the sudden bursts of wind which would have upset them if they had been out on the lake at the time. And then the first sheets of ice began to form upon the lake. By the end of the month they knew it was too late for an open-water



Claud K. Jones, the 25-year-old Canadian who used his own invention to locate the lost tractors through the ice of the lake.

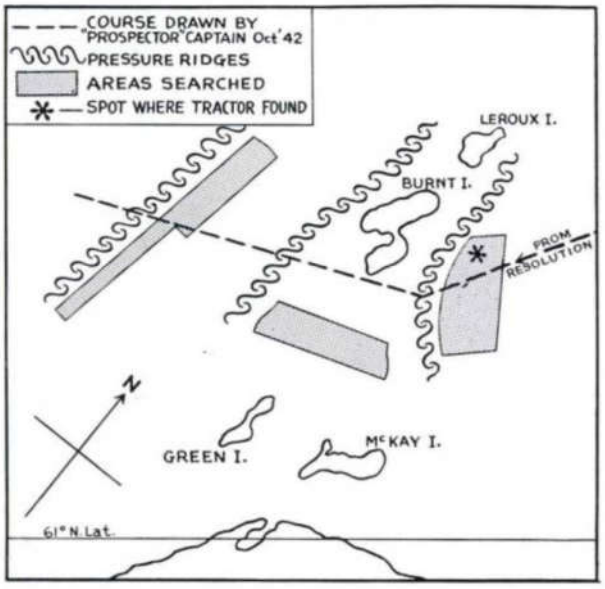
hunt, so they returned to Fort Smith barely in time to keep from being frozen in.

It was March 14 of the following year before they were out on the lake again, this time to search from the surface through the ice. Their equipment for this task was of necessity very heavy, and they had been advised to wait until the ice was thick enough before attempting the search. In addition to the tractor they had two trucks for haulage purposes and three cabooses in which men could be housed. The salvage crew was composed of six men—Claud Jones, the director; Gordon Greenway, a former trapper, and Dave Lent, George Clark, Art Dionne and Alex Benteman.

They had a rough idea where to begin looking for the lost machinery. When released, the barges had been about four miles west of Burnt Island. The wind had been blowing due west. The barges had come to rest on the south shore. Therefore it could be assumed that their cargoes had slipped off somewhere in a rectangle roughly four miles wide and eight miles long, or an area of some thirty square miles.

Methodically they began to comb this area. Usually they would take a bearing, mark it with something which would stand up against the steady west wind, and then run for about two miles straight from there, returning on a line about sixty feet to one side of their original track. This process would be repeated hour after hour. Because of the rough surface over which they had to move, progress was usually at the rate of two or three miles an hour.

Besides the wind and the frequent blizzards there were other difficulties. Possibly the worst of these were the pressure ridges of ice, great solid ice walls



sometimes reaching heights of twenty-five feet or more, which ran for miles across the lake in all directions. The formation of these walls was a physiographical phenomenon. On very cold days the ice would contract, and cracks would form. The open water in these cracks would naturally freeze. Then when a warmer day came, the great masses of ice would expand again, and the ice in the cracks would be pushed upwards. Since this process was going on all the time, it was only natural that the ridges would reach great heights.

Bechtel-Price-Callahan, who were also engaged in transporting pipe to Norman Wells, had hired a crew of men solely for the purpose of cutting tunnels through these pressure ridges and laying wooden bridges across the open spots. It was on these bridges that the young Research Council scientist had to rely when he wanted to cross a ridge with his heavy equipment. Quite often they would reach a ridge only to find that the log bridge had been pushed five or six feet into the air. Searching near the ridges was also dangerous, since the ice was very treacherous for a distance on each side.

They had been searching for about a week under the worst conditions imaginable without finding a thing and some of the gang were beginning to grow skeptical. One of them even went so far as to express grave doubts regarding the detecting device's ability to find the machinery even if it were right beneath them. In fact, he said, carried away by his own loquacity, the gadget had never once given a flicker of life, and how did they know it could come through with anything like the remarkable performance which had been attributed to it?

So much of this was all young Mr. Jones could stand. They might cast all the aspersions they liked on his own ability as a scientist, but he could not let them get away with expressing sarcastic remarks about his equipment. He decided to have a showdown.

"George," he said, "I want you to take a couple of pipe wrenches, an axe and some spikes, and go out on the lake. Dig a hole in the ice and bury them. Then come back here and I'll put Betsy to work."

George did so and returned, smirking a little.

"Now," said Claud, "drive around the lake and at some time or other in the next fifteen minutes, go near the spot where you've buried them. I'll tell you when to stop."

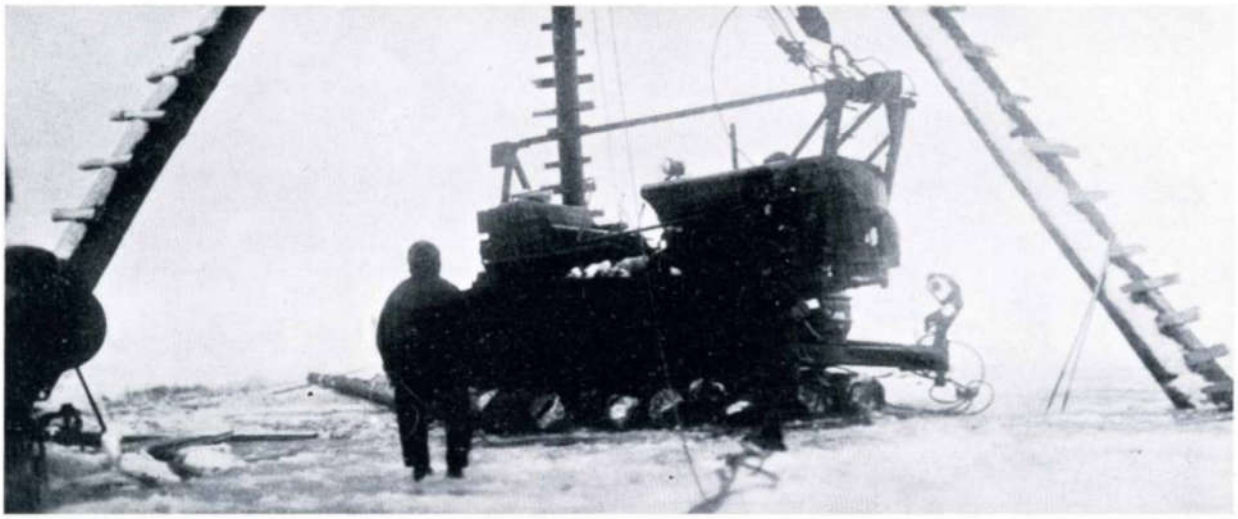
The driver did as he was told. Ten minutes later, passing near the spot where he had hidden the tools, he looked back to see if there were any sign of life from the caboose. Just as he was congratulating himself on his triumph he saw a block of wood sail out of the caboose window and land within two feet of the cache. This was followed by a loud yell from within the caboose, which was taken up by the crowd of grinning men who had followed the procession to see the fun.

Science, once more freed from the stigma of charlatanism, had proven its point!

Work continued apace all through the month of March. Troubles were still hounding them, as witness this extract from Jones' diary for March 24: "Grinding through about eighty acres a day now. One of the men came back the other night to say that the bridge crew had put their tractor in a pressure crack."

Then came a break: "March 27th—Got a beautiful signal that checked!"

This $10,000 tractor, after being hauled up through the ice from the bottom of the lake, soon moved away under its own power.



Raising the 300-pound anchor which caused the detecting device to respond. In the distance is Burnt Island.

March 28—"Dug hole in ice . . . at first thought it was only an anchor . . . then I could make out the general shape . . . started to run out of gas . . . went back to town for provisions . . . got stuck on the edge of the lake . . . no one cared . . . we were all pleased as Punch."

March 31—"Last day of the month and still 30 below . . . crew chopped through ice and we could see the 'cat.'"

From then on it was a race with time. Leaving the salvage crew to bring the caterpillar to the surface, a comparatively easy job, the young physicist continued the search diligently, conscious of the rapid approach of spring. The very next day they got another signal, and their elation knew no bounds. The delight was short-lived, however, for after two days of effort they brought the object to the surface and found out that it was only a huge sea-anchor, whose presence no one could explain.

Following this delay, they ran into a sheet of extremely rough ice, and were slowed down even more.

April 10 was a bad day all around: "Pressure ridges are flooding with the spring waters in the river now . . . Dave tried to get to the Hudson's Bay store at Resolution, but couldn't."

On April 13, things began to look so bad that they started to pack up. Crossing ridges was becoming more and more difficult all the time, and although dog teams would be able to run on the lake for another month, their heavy equipment could not do so.

Three days later searching operations came to an end. They would have to wait for the break-up, and then try for the rest of the stuff with boats and summer equipment. As before, they barely made it to the airport before the ground became too treacherous for ski-equipped planes to land. On April 18, a U.S. Army plane made an unexpected stop at Resolution going west, and Claud was aboard.

On the way to Hay River, the pilot's destination, the plane circled over the camp and Jones could see the sturdy log tripod which had been set up above the hole, and over to one side there stood the tractor, which had lain on the bottom of the lake for the best part of a year. As they watched, one of the men jumped in the driver's seat and drove the salvaged caterpillar round and round in circles. It was a cheerful sight, the last he had of the winter's operations. His mission only half accomplished, he was on his way back to the outer world, but he fully expected to return and finish the job.

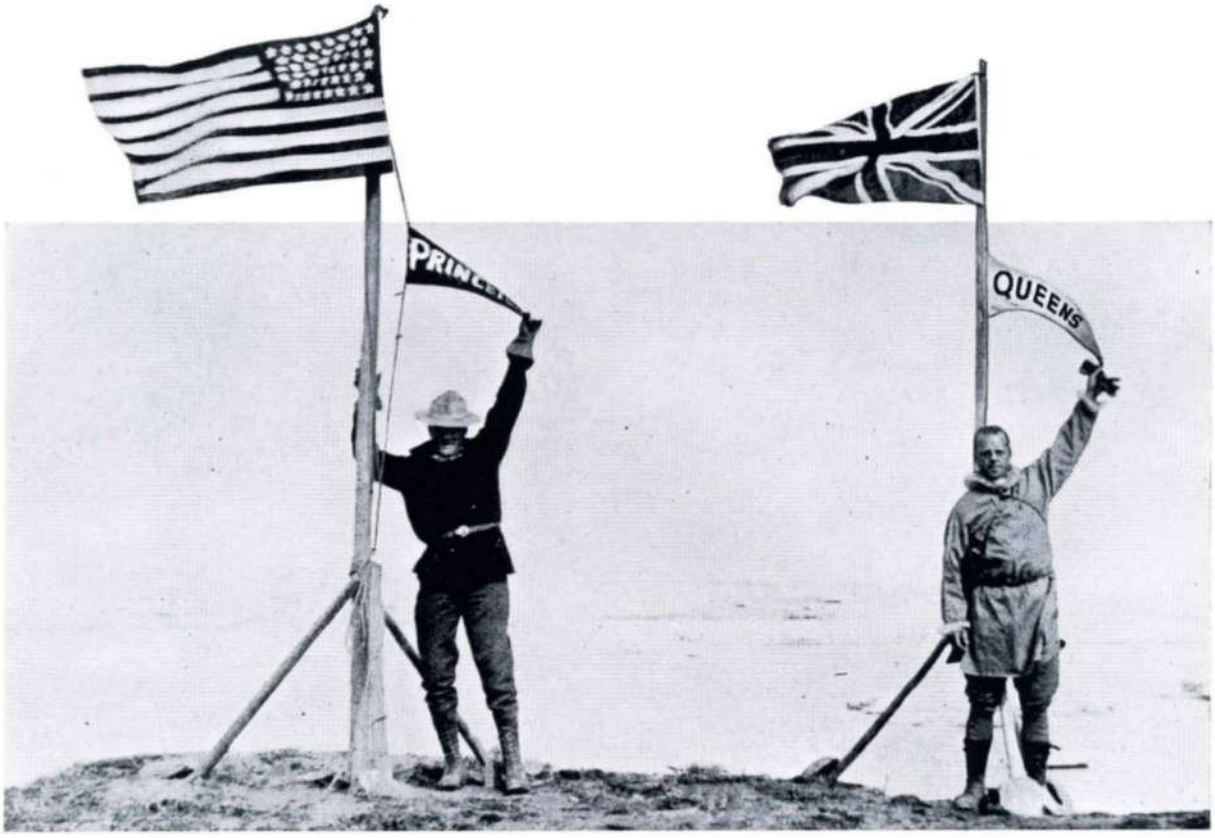
Back at the Research Council, the young scientist started planning his summer's campaign. His winter's experience had taught him that, with a lake as treacherous as Great Slave, you had to be ready for anything. He figured on building about a dozen of the magnetic locating devices, attaching them to boats or rafts and thereby making each boat a detector in itself. Thus he could cover the area ten times as quickly.

The details completed, he sent his suggestions to the U.S. Army, telling them what he required. He would need, he said, about a dozen small boats, several motors, the same barges. But, he argued, the work might be over in a very short time.

Unfortunately, it was another case of "too little and too late." The American firm had relinquished the contract, another had taken over, and boats were scarce. No, it couldn't be done. Besides, Norman Wells had been almost completed and there wasn't the same urgency there had been the previous summer.

The Research Council decided not to press the matter. The $10,000 tractor they had recovered from the bottom of the lake had paid for the costs of operation. The Battle of the Atlantic was in full swing, Canadians were fighting in all corners of the globe, and the armed services were placing more and more problems before Canada's scientists. Nobody could be spared for a job, which, without the proper equipment, might take months and months.

The problem of recovering the precious equipment has not been shelved entirely. After the war, when Canada takes up her place on the air routes of the world, the Northwest will come into its own, and tractors and bulldozers will be invaluable for settlement work. It may be that then, when peace has returned to the world, Canada will again turn with new instruments and new vigour to the task of raising the machinery which was lost on a stormy summer's day in the middle of the war.



Thomas Riggs and Jack Craig display the flags of their countries and the pennants of their universities after setting the final point of the Alaska-Yukon boundary in 1912 on the shore of the Arctic Ocean. Note that "Old Glory" has only forty-six stars.

Running the Alaska Boundary

The American Commissioner of International Boundaries, and former Governor of Alaska, wrote these reminiscences shortly before his recent death.

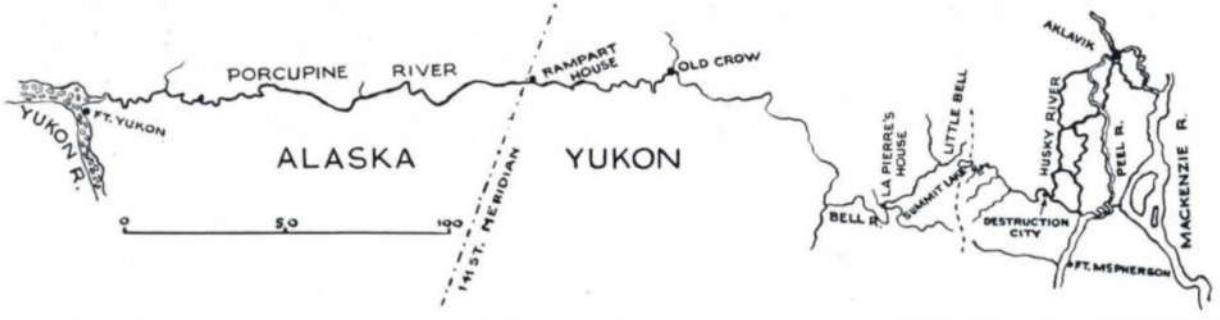
Story and Pictures
by Thomas Riggs

BEFORE the United States bought Alaska from the Russians in 1867, the Hudson's Bay Company had acquired rights from the Russian government to place establishments on the mainland of Alaska. Only the Panhandle, however, was considered at that time. Thomas Simpson had set up the Company's flag at Point Barrow in 1837, and claimed his coastal discoveries as far as that point in the name of William IV. But the interior was unknown—and rich in furs. There was no marked boundary line between the Russian and British possessions, so what was to stop the Company from pushing out from Peel's River House (Fort McPherson) up the Rat and across the low portage of the Bell River into the Porcupine? In 1842 a relay post was built by John Bell at the confluence of the Bell and Porcupine and called La Pierre's House, and four years later he pushed on down the Porcupine to the broad dry flat of the Yukon. There in 1847, Alexander Hunter Murray established the Company post of Fort Yukon with its well kept buildings inside a high stockade.

Fort Yukon was a prosperous post. At that time there was no navigation on the Yukon, and all supplies for the fort came by way of Mackenzie's River. Higher up, Robert Campbell established Fort Selkirk in 1848 near the mouth of the Lewes River on the Pelly. Three years later he started to explore down stream, and to his great satisfaction he eventually sighted a fort flying the Company flag. It turned out to be Fort Yukon. Thus he proved that the Pelly and the Yukon were the same stream.

At Fort Yukon the Company remained in undisputed possession until 1869, when it was notified by Capt. C. W. Raymond of the U.S. Corps of Engineers that trading by the Company must cease in American territory. Soon the buildings went to ruin and were washed out by the encroaching Yukon. Nothing now remains of the Company occupancy but a little graveyard under the hills.

The Company moved its equipment up the Porcupine to Rampart House (now Old Rampart House), where it stayed until 1889. In that year, John Henry Turner of the United States Coast and Geodetic Survey astronomically located the boundary some



thirty miles up the Porcupine from Old Rampart House, where he built his winter quarters; so once more the Company had to move, this time to a site on a bluff just over what was thought to be the international line. The final boundary was changed but little from Turner's determination.

We started running that boundary in 1907, from an astronomical station on the south bank of the Yukon River. The first section was run south along the 141st meridian to Mount Natazhat, across the White River. In 1909 the second section was begun, from the north bank of the Yukon to the Arctic Ocean, which was reached in 1912. In this work I was joined by Jack Craig, of Canada, who became my lifelong friend. From 1910 to 1913 we were the engineers in charge for our respective countries.

As may be imagined, running a boundary line through that wilderness was no easy job. We had to open a twenty-foot skyline vista through four hundred miles of forest, and set up over two hundred permanent monuments to mark the line. Our joint party in 1911 numbered one hundred and five people and one hundred and sixty-six pack horses. On the larger rivers we used three or four launches, and on the smaller, canoes and poling boats.

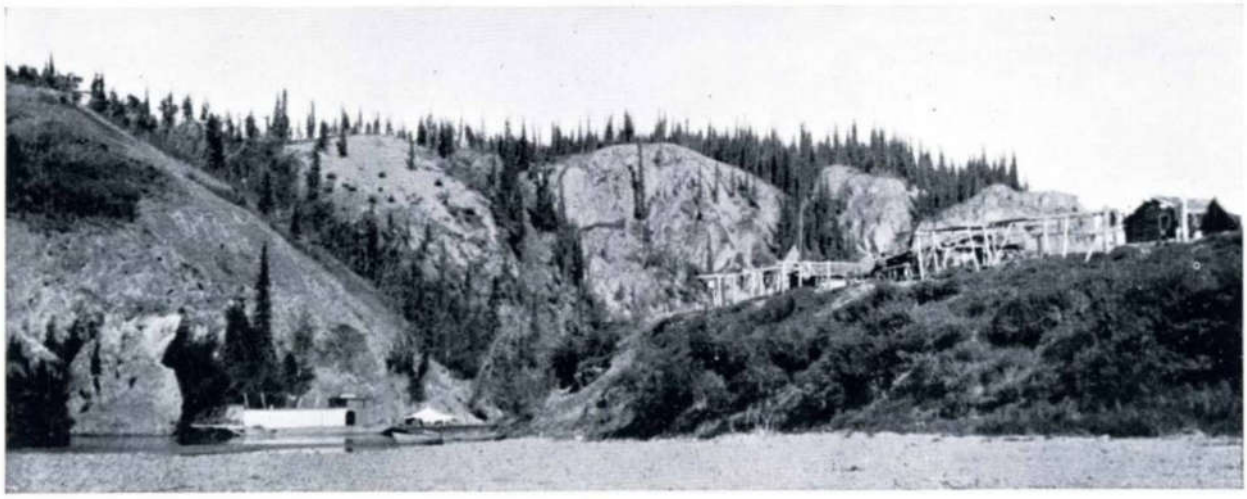
Briefly, our method of working was as follows: The meridian of 141 degrees west longitude was determined, as I have said, by astronomical observations on the south bank of the Yukon, using telegraphic signals for getting difference of time. The azimuth due north and south was observed and points marked on the ground. This line was carried south and north from station to station by precise methods with theodolite. Monuments of aluminum bronze of two types were set up to mark the line at intervisible points. Eleven five-foot sectional monuments were erected at important points, such as river crossings and the Arctic Coast. All the rest were thirty-inch cones.

A scheme of triangulation was extended along the boundary line and the geographic positions of all monuments were determined on the Yukon astronomical datum. A line of precise levels was run from tidewater at Skagway to a point on the boundary south of Fortymile River near Glacier, Y.T., for the control of elevations. Finally, a topographical map of a four-mile strip of the country, two miles on each side of the line, was made along the 141st meridian from the Arctic Ocean to Mount St. Elias, comprising thirty-eight sheets. The section from Mount Natazhat south to Mount St. Elias was the last to be run, and was finished in 1913.

A Rampart House Indian off for the caribou hunt.

It was on June 1, 1911, that our parties landed at Rampart House. The scene from the deck of the *Delta* was like that of a movie—the Indians in beaded

The site of the Company post at Old Rampart House, burnt about 1890.



Furs ready for shipment at Rampart House in 1911.

coats and moccasins; the squawmen and traders with scarlet toques and Hudson's Bay scarfs; dogs, dogs everywhere. Few of the Indians had ever seen a steamboat, and fewer yet a horse. When the horses were turned loose, not an Indian could be found, and the dogs ran howling to the hills. In a few days the Indians became bolder and one even found courage to be put on a horse. Unfortunately, the dogs came back. The horses were called the "big caribou." (Later on in the Arctic, the Eskimos called them the "big dogs" and said if they could buy one, they would put up lots of fish.)

The trading post at Rampart House had been abandoned by the Company shortly after it was built. Years later, a trader named Dan Cadzow moved in. Dan maintained his post in the traditional Hudson's Bay manner. On one side of a little creek stood Turner's old quarters and the trader's house; on the other side the houses of the Indians, who numbered about one hundred in all. Dan built what he claimed to be the largest house in Canada north of the Arctic Circle—the store in front, an upper fur loft and living quarters for himself and his Indian wife, Monica, in the rear. The place was run as closely to old Hudson's Bay practice as possible. Practically all material was traditional Hudson's Bay, such as the old-time axe shapes, the Assomption sashes, blankets, etc. I think Dan liked to think of himself as a Hudson's Bay factor. He had a keg of rum sent over from Fort McPherson by the old trader, John Firth. The rum had come into the Arctic by whaler and then up the Mackenzie River. So smooth was it, that one hardly felt it going down the gullet; but one drink—and drinks in the north are of man's size—was quite enough for the ordinary man.

Thirty miles farther down, at Old Rampart House, lived John Deacon and his little wizened squaw. He was one of the greatest Indians I have ever seen. Over eighty years of age, gnarled as an old oak tree, six feet six inches or more tall, straight as an arrow, but alas, almost blind. He was the last of the company trappers left on the Porcupine River. With quiet dignity he said, "I am the last of the Hudson's Bay men." He was proud to have worked for the Company. He asked for nothing, but I looked into his neat cabin and saw little in the way of food. I left a sack of flour, some beans, sugar, and tea. He accepted it as his right.

That year, 1911, was an eventful one. There had been an outbreak of smallpox at Dawson. Bishop Stringer of the Anglican Church, on his annual trip to visit the Indians, brought with him presents to distribute. Some of the clothing must have been in-

Big John Deacon looked like a character out of an eighteenth century novel.

fected, for during the summer the scourge broke out. Over sixty Indians came down with the disease. Craig and I isolated those afflicted on an island in the Porcupine River just on the Canadian side of the boundary. The clean Indians we sent to the hills. The survey furnished them with food and tents to the amount of about $3,000. The Canadian government sent a nurse, policeman, and lumber for a hospital which was built on the island. By mid-January the epidemic was over. One child had died. The supplies were charged to me on the inventory. I requested reimbursement from my government but was refused, for most of the Indians were Canadian Indians and had been quarantined on a Canadian island. My salary was $3,000 per year, so here was a year's work given away. Craig presented my case to the Canadian government, which promptly paid the indebtedness.

When we returned to Rampart House the following year, Cadzow met me and told me to beware of a certain Indian, the father of the dead child. In reply to my question as to why I should avoid this particular Indian, Cadzow told me that under Indian law when a person is killed or dies, should another be thought responsible, then that person must atone through his own death. I was elected to be the victim. This did not particularly appeal to me. As an alternative Cadzow suggested that should I make a gift commensurate with the value of the child, all could be satisfactorily arranged. A sack of flour and some tea saved me perhaps from a shot from ambush.

Queer things happen north of the Arctic Circle. One day when the smallpox epidemic was at its peak, a small bark canoe came floating down the river. In it was a lone, tanned and bearded man. I met him at the landing. I told him he must not land. Great was his disappointment, for he was looking for local colour for a book. He agreed that he did not wish to be held in quarantine further along. I gave him necessary food and waved him good-bye. "Who was that?" asked a bystander, Ab Shafer, when I climbed the bank. "That," I said, "is Robert W. Service, the man who wrote the *Trail of '98*." "Call him back," said Ab, "I want to massacree him." Only he didn't say "him."

There are many impressions to be gained in the land of the midnight sun. The almost unbroken silence—even the frontiersmen and Indians speak in low voices. There is the air of continual watchfulness, not by quick turns of the head or body, but the slow shifting of the eyes, the deliberate movement when given the still alarm of a nearby person or beast. Even I absorbed this faculty, and for years, though in profound slumber, the slightest movement would startle me into alert wakefulness.

For mosquitoes I hand the palm to the Old Crow flats. I have seen a man give up and have to be dragged into a tent. I have seen horses lie down and die from the bites; and then on the Arctic Coast when the wind blew off the ice, I have seen horses fill up on the lush grasses in half an hour and lie down contentedly, only to stampede violently when the wind changed and the pests returned.

There is mystery on the Arctic shores. The mirages shooting up rays like the steel work of enormous buildings. The distortion of everything. The "polar bear" I stalked for a mile, only when in range to have it fly away—a gull! The laugh we had on the packer who led his train far out in the tundra to avoid a lake which was not there. The tragedy: eight skeletons huddled together in a little hollow.

And on a hillside near the Firth River, first an old rusty Winchester, then a frying pan, and then, back of a crude windbreak, what had been a white man. An undecipherable note book, a torn blanket. The foxes had been there years before.

Not far from Demarcation Point, where we ran the boundary into the Arctic Ocean, Craig and I hoisted the flags of the two countries, one on each side of the line, and called it a day. With all the pride of accomplishment, I can say that it is the straightest long line in the world. There were never better friends than this Canadian and this American. One of them is now the American commissioner of international boundaries: the other has followed the trail over the last hill.*

*This was written shortly before Mr. Riggs also "followed the trail over the last hill," on January 16, 1945.

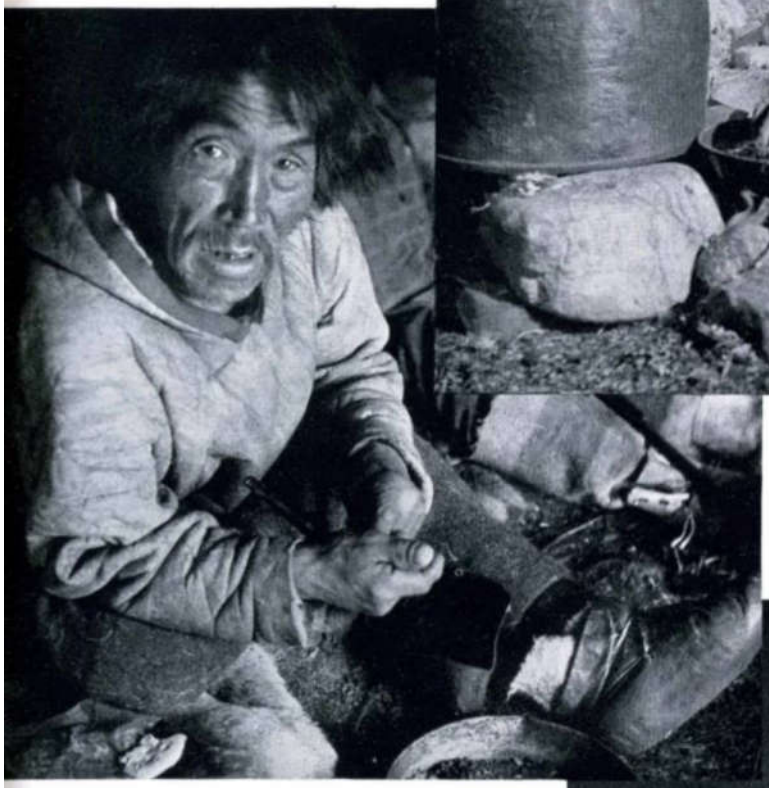
Bishop Stringer and his flock at Rampart House.

Atamaoya is the Eskimo substitute for tobacco. It is made of the leaves of the ground cranberry which the woman is gathering here.

Atamaoya

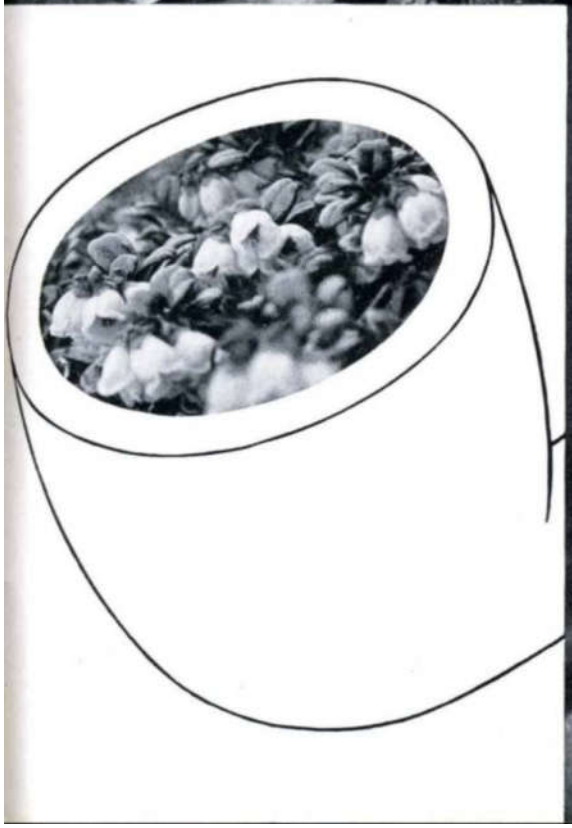
by D. B. Marsh

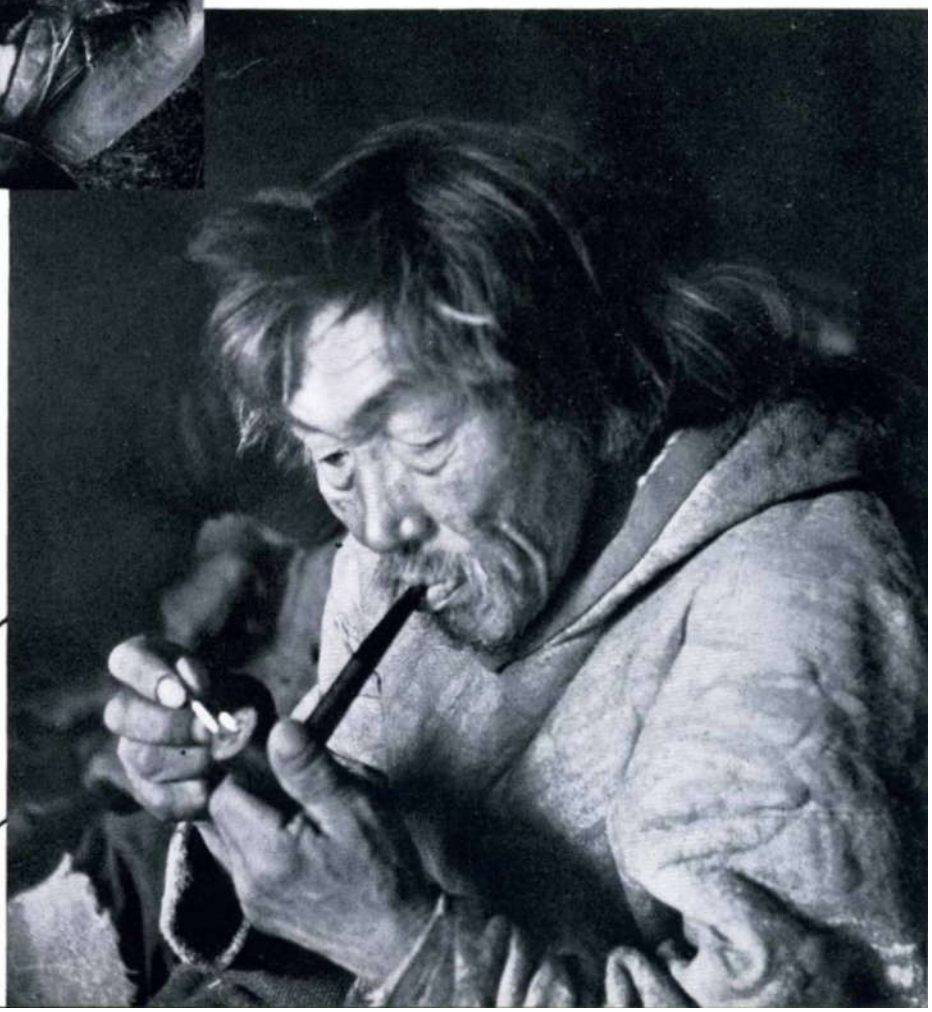
After the stems have been removed, she dries the leaves in a frying pan over a small fire. She then cuts them up on a board with her semicircular knife.



Her husband fills his pipe with a mixture of atamaoya and tobacco, and lights it. The smoke is rather pungent, but some white men have grown to prefer the mixture to pure tobacco.

In the pipe bowl: The flowers and leaves of the ground cranberry.





FALL PACKET

Twenty-five Years Old

This is quite a year for H B C anniversaries. Besides the 275th birthday of the Company, which was celebrated last May, 1945 also sees the 150th anniversary of the founding of Fort Edmonton and the twenty-fifth birthday of *The Beaver*. With the present issue, in fact, this Magazine of the North completes its first quarter-century.

As it is highly unlikely that anyone reading this will remember the remarks on the same subject made in the September 1941 issue, a brief resumé of *The Beaver's* development to date will perhaps not be out of place.

It began as a monthly in the year of the Company's 250th anniversary. The first issue was that of October 1920; but it was considerably smaller than the present magazine, being only 10 by 6¾ inches, and the articles and photos were designed to interest the staff member rather than the outsider.

After four years it became a quarterly, continuing along much the same lines. It was not until September 1933 that the present format was adopted. The late Douglas MacKay, who was responsible for its improved contents and appearance, had joined the Company the year before, and had perceived that its operations were of great interest to people outside the firm. Since that time, *The Beaver's* contents have been selected more and more with an eye on the reader—whether of the Hudson's Bay Company or not—who is interested in the Canadian frontier. The fact that it is published by the Company does not mean that it is concerned chiefly with the H B C. (The last issue, of course, was an exception). In the present number, for instance, out of twelve articles, only one is directly concerned with Company operations while five do not mention it. In the March issue, only three had to do with the H B C and only one other was remotely associated with it.

Some readers prefer historical articles: others will have none of them. Some like to read about the Arctic: others about the woodlands. *The Beaver* tries to hit the happy medium by dividing the locale of its stories as evenly as possible across the North, and their subject matter equally between historical and modern.

The response from the public has been gratifying. In less than ten years—and those include the uncertain years of the war—subscriptions from outsiders have risen from 480 to 6320, and with the last issue the total circulation reached 15,000. Many of the leading university libraries subscribe and bind the back numbers, some of which are becoming almost collector's items. New subscribers, who find the magazine fills a long felt want, buy up back numbers that are available, and a list of those still in print, with prices, has been prepared for their benefit.

With the return of peace, and with the upswing in interest and activity occasioned by the war, the North is looking forward to a period of great changes and great development. That development will be reflected in the pages of future issues. But for those whose chief interest in the north country lies along the unfrequented trails and waterways of the wilderness, *The Beaver* will continue to function as a magazine of the true North.

Mulberry

One of the greatest and best-kept secrets of the war was "Operation Mulberry"—the huge pre-fabricated harbour that was built in England, towed across the Channel, set up in the sea off the French coast, and used in the invasion of Europe. The whole vast project was conceived, planned and carried out by the British, and experts have described it as one of the great engineering feats of history.

By means of working models, enormous relief maps, and so on, the scheme was worked out in detail inside the operations room of the British War Office. Only a very few chosen officers and ministers were allowed inside that room; but now, in a sense, the Canadian public is to be admitted. The whole operations-room layout of the Mulberry project, just as it stood, has been brought across the Atlantic, and is being exhibited from coast to coast by the Hudson's Bay Company, in collaboration with the Engineering Institute of Canada.

The exhibition, which occupies some 7,000 square feet, and requires three freight cars to move, will be opened by the Governor General in Ottawa, at the Chateau Laurier, on September 4, and during the next twelve months will be shown in the principal cities of the Dominion from Vancouver to Halifax. To date, it has been shown in only two other cities—London and Paris—where it drew enormous crowds.

Canadians feel a special interest in Mulberry, because it was the raid on Dieppe which showed the necessity of having such a prefabricated port, through which the invading armies could be supplied without using one of the large French harbours.

Canada Foundation

Now that the war is over, Canada is looking forward to an era of development—industrially, commercially, and (we hope) culturally. To encourage her cultural growth, the Secretary of State has issued a charter incorporating a body known as the Canada Foundation. Prime object of this organization is "To further the development of the Canadian nation and to promote, both at home and abroad, wider knowledge and better understanding of the life and thought of the Canadian people."

Its initial object is a foundation fund of one million dollars, and money from this fund "will be pumped into the stream of Canadian cultural activity." The board of trustees is made up of seven distinguished Canadians under the presidency of Mr. Justice J. T. Thorson, president of the Exchequer Court of Canada. The director is Walter B. Herbert of Ottawa.

Contributors

J. L. CHARLTON has been with the Company for seventeen years, stationed mostly at Northern Ontario posts. He is now manager at Cat Lake, Ontario. . . . FRANK H. ELLIS of Hollyburn, B.C., specializes in the early history of aviation in Canada, and has contributed several articles on that subject to *The Beaver*. . . . MISS MARY MACLENNAN, secretary to the superintendent of schools in Ellensburg, Washington, makes a hobby of photography, and of travelling in B.C., which she considers "a paradise for vacationers." . . . VEN. D. B. MARSH, one of the leading photographers of the North, is Archdeacon of Aklavik. His pictures in this issue were taken at Eskimo Point, on the west coast of Hudson Bay, where he was stationed for several years. . . . DAN MCCOWAN, F.Z.S., naturalist, of Banff, will be remembered as the author of the grizzly bear article in the March issue. . . . SGT. W. H. NEVIN has been a member of the R.C.M.P. for fourteen years, and has served in Ontario, Nova Scotia, Saskatchewan, and the Western Arctic. Recently he was transferred to the personnel department at the Ottawa headquarters. . . . THOMAS RIGGS, at the time of his death in Washington on January 16, was the American Commissioner of International Boundaries. During the first world war he was in charge of the Fairbanks division for the location and construction of a government railway in Alaska. In 1918, President Wilson appointed him Governor of Alaska, in which office he served three years. . . . WILLIAM STEPHENSON is an Ottawa writer.

Transposition

In making the plate for page 54 of the June issue, the second and third verses of the poem sent by the Governor unfortunately became transposed. The last verse of the poem should therefore be that beginning: "Never the weight of centuries . . ."

Return of the Dove

Since the danger of air attack on London came to an end, the archives of the Hudson's Bay Company have been gradually moving back from the country to their proper home. During the war, they were stored in the basement of the Governor's house at Hexton where, although research among them was impossible, they were at least reasonably safe from bombs. As it turned out, the precaution was unnecessary, since Hudson's Bay House in London, where the archives are customarily kept, escaped major damage. But that was only by great good fortune.

Beaver House also escaped the assaults of the bombs and V-weapons, and a service of thanksgiving for its preservation and that of its staff was held in St. James, Garlickhythe, on June 12, at the invitation of the rector. It was attended by the Governor, who read the lesson, the Deputy-Governor, and Committee, as well as by members of the staff. As a great deal of damage was done to the buildings all around Beaver House, its preservation is all the more remarkable.

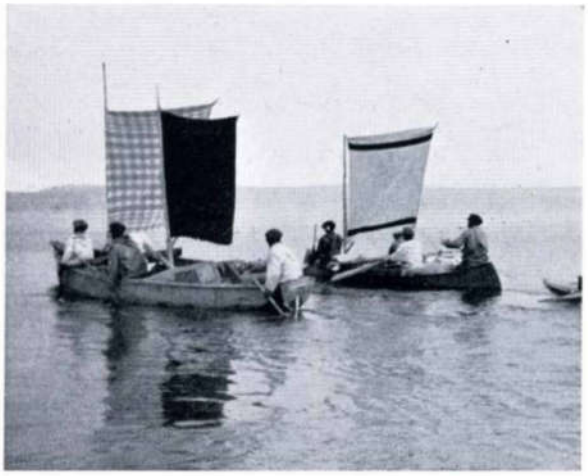
Henry Hudson

It has been proposed by Capt. Ernest Shankland, R.N.R., formerly chief harbourmaster of the Port of London, that a conspicuous memorial be erected there to Henry Hudson. Capt. Shankland made this suggestion in the columns of *The Times* at the time of the 275th anniversary of the Hudson's Bay Company.

At least four memorials do exist which commemorate the exploits of the intrepid navigator. Three of these are geographical—the great inland sea from which this Company takes its name, the icy strait leading into it, and the river at whose mouth stands the city of New York. The fourth is man made, and could hardly be called conspicuous. It is a stained glass window in the Church of St. Ethelburga the Virgin, which stands in the shadow of Hudson's Bay House, London. The window was presented by the Company in April 1928, to commemorate the fact that, in this little 15th Century church, Hudson and his crew took communion before setting out on a voyage of "Discoverie toward the North Pole, set forth at the charge of certaine Worshipfull Merchants of London, in May 1607."

This voyage was made on behalf of the Muscovy Company, or—to give its title in full—"The Mystery and Company of the Merchants Adventurers for the discoverie of regions, dominions, islands, and places unknown." Only four and a half months after setting sail, Hudson returned to London, having failed in a brave attempt to find a short route to China by way of Greenland. He had turned back only after his tiny vessel had been stopped by ice in 82° north latitude—about 550 miles farther north than the *Nascopie* goes on her regular trips.

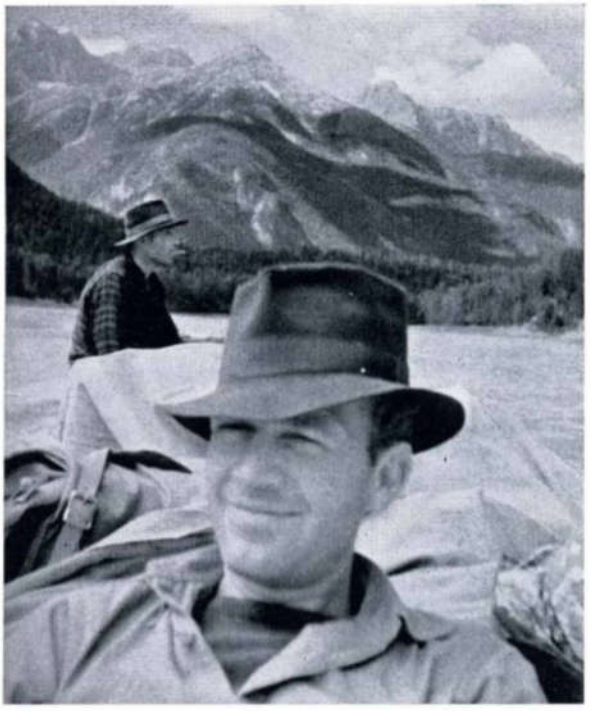
Next year, Hudson made another voyage for the Muscovy Company, and in 1609, after trying unsuccessfully to make the Northeast Passage, turned west and south, and discovered the Hudson River. The following year he sailed into the great strait and the bay where he perished. Old maps bear this legend in the spot where later Charles Fort and Rupert's House were built: *Hic hibernavit Hudson.*



Fiction and fact: Left: "Adventurer," a painting by Arthur Heming (now owned by A. J. McNab, New York) showing voyageurs using a pair of H B "point" blankets as a sail. Right: Natives nearing Kanaaupscow post adopt the same idea. Glen Speers.

Above: The beautiful whooping crane, whose nests are being sought in the Canadian West. Saskatchewan Provincial Museum.

Below: Canada Geese hatching. William Blowey.



"This is the life!" says Dr. Froelich Rainey of the American Museum of Natural History, as he voyages down the Peace River. He was outfitted at the H B post, Hudson's Hope, before setting out to search for prehistoric Indian remains. Bradford Angier.

Here and There

White water on the Fort George River. Glen Speers.

BOOK REVIEWS

Largest Lake

LAKE SUPERIOR, by Grace Lee Nute. Bobbs Merrill, Indianapolis, and McClelland & Stewart, Toronto, 1944. 376 pages. One of the American Lakes series.

IN all the wide world there is nothing like Lake Superior—not only because it is the largest body of fresh water on earth, but because it is also the highest, coldest, deepest, and most northerly of the five Great Lakes of America. A lake so completely "superior" in every way deserves to be better known than it is, and Dr. Nute has performed a much-needed service in setting down the unique story of the great inland sea she knows so well.

The whole grand sweep of its history is dealt with here, from its discovery by Etienne Brulé in the early 1620's to the present day activities that are carried on beside and upon its cold and turbulent waters. The fur trade is covered in Part I, where a chapter each is devoted to the French regime, the North West Company, the American Fur Company, and the Hudson's Bay Company. A chapter on the missions of the lake rounds out this part.

Part II deals with the lake shipping, from the small Indian canoes to the mammoth lake freighters of to-day; the iron and copper mines; the fishing industry; and the lumbering operations. Part III is devoted to the south shore, including the two Saults Ste. Marie, and Part IV to the north shore and Isle Royale. Part V is a survey of the artistic and aesthetic side of life around the lake, from Indian legends and pictographs to modern novels.

Dr. Nute is known as a historian of great thoroughness, and her treatment of this large and varied subject is scholarly as well as readable. Possibly it might have been even more readable if some of the statistics had been relegated to an appendix. This reviewer has noticed only a couple of slight errors: Simpson's tour round the world in 1841-2 did not result in a knighthood—he received it before he started; and Rupert's Land comprised far more than present day Manitoba.

An interesting point is made about the Paul Bunyan legends. The author states that the original legends were the brain children, not of the old time lumberjacks, but of "a certain resourceful and canny resident of Rhinelander, Wisconsin." She holds that no great novels or poems have as yet appeared to immortalize the Lake Superior country. *Hiawatha* is the best literary effort to date. Certainly there is a magnificent opportunity here for a truly great book, dealing with the Indian and fur trader or the lumberman of the past, or the sailor or fisherman of the present.—*C.W.*

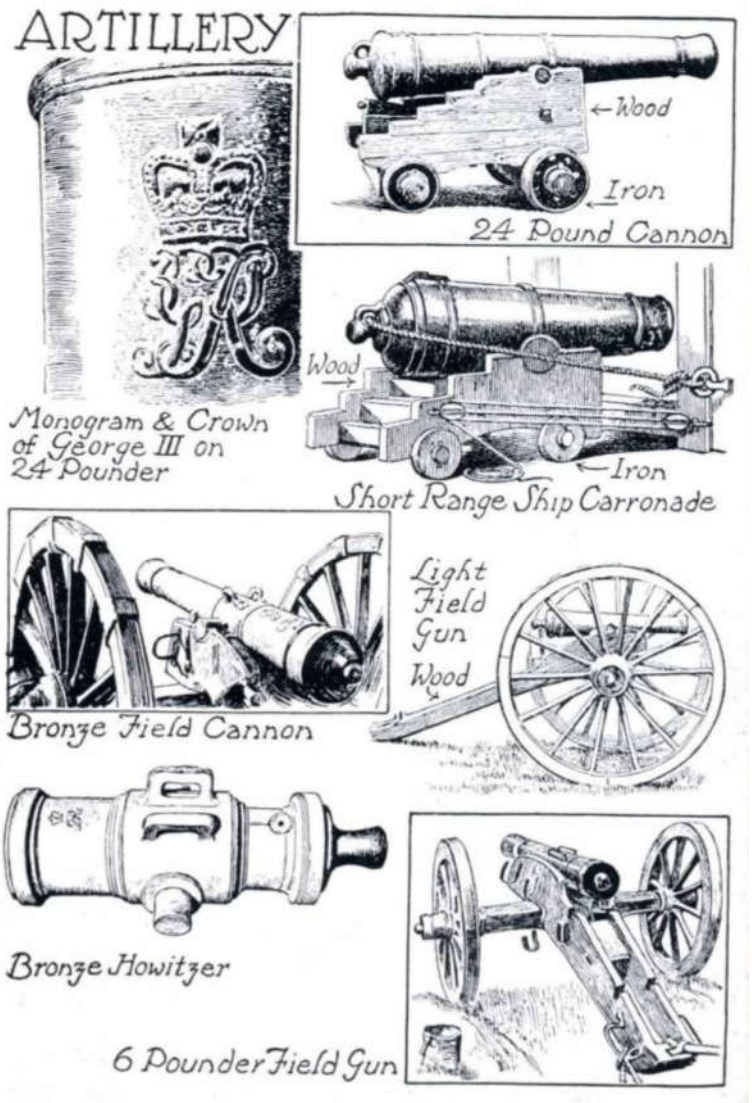
Details of the Past—2

THE PICTURE GALLERY OF CANADIAN HISTORY, Vol. 2, 1763-1830, by C. W. Jefferys, assisted by T. W. McLean. Ryerson Press, Toronto, 1945. 271 pages.

THE standard set by Dr. Jefferys in the first volume of his *Picture Gallery of Canadian History* (see *The Beaver*, December 1942) has been admirably maintained, if not surpassed, in volume two. The artist-author again brings to his task—in which he obviously delights—a wide knowledge of the costumes, the furniture, the utensils, the buildings, the arts and crafts, the tools, the weapons, the vehicles and the vessels used in Canada during the seventy years succeeding the Conquest. And his depiction of them is as faithful to detail as painstaking research and a careful pen can make it. Dr. Jefferys is a master of pen-and-ink, and some of his finest work in this medium is to be found between the covers of this little book.

As is to be expected, there are fewer details here which are open to question than there were in the volume which dealt with the pre-Conquest period. The artist has made use of a great many contemporary drawings, as well as of buildings, furniture, and other objects which survive from the first part of the British regime, and the standard of authenticity has thereby been raised.

A page from Dr. Jefferys' book.



Though the point is partly covered on page 82 of volume one, he could well have included in his details of construction an example of the square-log buildings, with uprights at intervals, that were erected by the fur traders of this era from Quebec to British Columbia. And in his page (177) on the Red River cart, he might have mentioned that the rawhide-bound wheels were not universal. One cart of this type has certainly survived in Edmonton, but there is little to indicate that this was the general practice.

The only error worth noting in the northern field is the boundary of Rupert's Land as shown in the maps on page 42. It should surround the entire watershed of Hudson Bay, including the Selkirk Grant.

As in the previous volume, several pictures have been copied from photos in *The Beaver*, notably those on pages 215-7 and 233-4; and the author generously refers to this magazine, as well as to the Company's Historical Exhibit, as a source of valuable data. The pictorial information is again enlarged upon by supplying additional notes at the end of each part.—*C.W.*

Around the Arctic

WITHIN THE CIRCLE, Portrait of the Arctic, by Evelyn Stefansson. Charles Scribner's Sons, New York, 1944.

THE authoress is Mrs. Vilhjalmur Stefansson, wife of the famous explorer, formerly his secretary, and his associate in Arctic research. The book is a sort of brief Arctic encyclopaedia. It is packed full of information, set out in what might be called telegraphic style, and profusely illustrated. Unfortunately, the paper is the wartime product which by no means does justice to the pictures.

Mrs. Stefansson does not claim to have visited the lands surrounding the polar regions which she describes, and her information is evidently derived from books and studies. The book is quite short, with only 155 pages of narrative and photographs. There are chapters about Arctic Greenland, Grimsey, an island north of Iceland and within the Arctic Circle, Lapland, the Soviet Far North, Northern Alaska and the Canadian Arctic.

The parts about Greenland and Lapland were the most interesting to this reviewer, particularly the descriptions of the fabulously rich Lapland iron mines so valuable to the Nazis in the war, with their electrified railroads and city. The chapter on Russia is admittedly all pre-war, as little or no information about the Soviet Arctic has come out in the past five or six years.

The chapter on Alaska deals mostly with important archaeological discoveries made in recent years, describing also how the Point Hope Eskimos hunt whales and otherwise enjoy life.

The last chapter is on the Canadian Arctic and is a little disappointing for its brevity, but the story is told of radium, the Government reindeer venture, Aklavik, the well-worn story about Eskimos with $25,000 schooners paying $10,000 income tax, and finally several pages devoted to Dr. Livingstone and his Polar Sea Dairy Farm. One of the best photos is of Charles Reiach, Hudson's Bay Company post manager, valuing white foxes in the loft of the Company's Aklavik warehouse, where many fine H B C men have made many bales of fine furs.—*R.H.G.B.*

25 Years of 1920-1945

The Beaver

A MAGAZINE OF THE NORTH

A list of available back numbers with prices will be sent on request.

IN the year 1869, the Hudson's Bay Company surrendered control of the territory known as Rupert's Land, retaining one-twentieth of the area of what was described as the "Fertile Belt." The Dominion of Canada agreed that the Company should retain this portion in part recompense for two centuries of exploration and pioneering carried on in the wilderness of the North and West.

For many years, the Company has been disposing of these lands to farmers in Manitoba, Saskatchewan, and Alberta. The remainder is now offered for sale or lease. Information about prices and terms may be obtained from

LAND DEPARTMENT

Hudson's Bay Company

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